

MASTERDRIVES VC 6SE70 Applied AC Drive

MASTERDRIVES™ represent the most advanced line of AC drives in the world today. Completely uniform from 1HP to 5000HP. MASTERDRIVES share an identical operator interface across the line.

Siemens drives, used worldwide, are available for virtually every drive application: pumps, paper machines, centrifuges, transport systems, cranes and hoists, elevators, presses, and converting machines. MASTERDRIVES are designed to operate in a wide range of voltages from 380-690 Volts AC and 510-930 Volts DC. The drive was also designed to meet the world's toughest quality standards including CE, UL, CSA, EN, and IEC/VDE. All MASTERDRIVES are manufactured in ISO 9000 registered facilities. MASTERDRIVES excel at applied applications with the capability to communicate with almost any automation environment.

MASTERDRIVES also perform difficult applications like winder control, electronic line shaft and linear positioning by using Technology Board options instead of a connected automation unit. A standard that the MASTERDRIVES have provided throughout the product life cycle is **Common DC Bus**. The design allows for power sharing among inverters with the option for regenerative or non-regenerative converters.

Standard Features

One hardware platform to provide:

- V/Hz control
- V/Hz with speed feedback
- Open loop vector
- Closed loop vector
- Torque control
- Textile mode
- One control platform to accommodate ratings from 1 through 5000HP
- Automatic voltage adjustment within the power range.



Complete Protection

(Selected examples)

- DC link under voltage protection
- DC link over voltage protection
- Heat sink over temperature protection
- Inverter overload protection
- Inverter over current protection
- Ground fault protection
- Motor pullout protection
- Ground fault check during start-up
- DC link limiter
- RAM/EPROM/EEPROM malfunction protection

Siemens - Your Best Choice

MASTERDRIVES 6SE70 product line is integrated into the Siemens family of drives, motors and automation and is backed by Siemens worldwide service and support capability. Contact your local Siemens Sales Office, Distributor or authorized Siemens System House to get the complete story of the MASTERDRIVES.

Standard Features (continued)

- Self tuning (Measurement of motor parameters & speed loop optimization)
- .001 Hz set point resolution
- 4 complete control parameter sets
- Flying restart
- Frequency avoidance
- Kinetic buffering with power dip ride-through
- Dual Port Ram for efficient integration of option boards
- Microprocessor based adjustable frequency drive with sinusoidal PWM current control.
- IGBT inverter bridge through entire power range
- Two analog inputs
- Two analog outputs
- 4 configurable binary inputs or outputs
- 3 binary control inputs (24VDC Control)
- 2 ports for RS232/485
- Over 100 Warning and Fault messages

Adjustments

- "Key coded" controlled access authorization to the individual parameters.
- Adjustable Carrier Frequency
- Gain of Frequency/Speed Regulator
- Integration of Frequency/Speed Regulator
- Self-Tuning with dynamic target
- Individual adjustment of torque and current limits

- V_d Max Regulator
- Space vector regulator method for IGBT's
- Motor overload w/adjustable thermal time constant
- Analog Scaling
- Frequency avoidance bandwidth
- Constant voltage frequency
- Selectable motor operating mode

Options:

- CBP2 Profibus Communication Board
Profibus DP interface to 12 megabaud
- CBD Communication Board DeviceNet::
DeviceNet Protocol Communication Card
- CBC Communication Board Can:
CAN Protocol Communication Card
- SLB Simolink Board
11Mb fiber optic peer to peer
- SCB1 Communications Board
Additional I/O interface via fiber optic link
Peer to Peer communication port (fiber)
- SCB2 Communication Board
Additional RS 485 communication
Peer to Peer communication port (copper))
- Technology Boards
T100 for user configurable functions
T300 & T400 with pre packaged software
- EB1 & EB2 Boards
Additional I/O interface (copper)

Specifications	
Input Voltage	380-690 AC +/- 15% 510-930 DC +/- 15%
Frequency	50-60 Hz +/- 6%
Control Voltage	24 VDC (120VAC option)
Operational Ambient	40°C
Installation Altitude	Up to 3300 feet
Overload	150% for one minute 175% for 30 sec (200 HP and below)

* Now available in Compact PLUS form factor

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