

# Servo Controller

## MC 1-10/MC 1-20



MC 1  
Face side



MC 1  
Rear side

## General

The servo controllers MC1 series are freely programmable compact controls for a linear and rotational unit with servo motors. The 1 axis controllers integrate all necessary components (interfaces, motion controller, voltage supply, drive regulator, safety circuits, control elements) that are required to control an axis in a compact table housing. The enclosed software PAL-PC can be used for programming.

There are two options available:

- MC-10: To control servo motors with brushes
- MC-20: To control servo motors without brushes

## Ordering information

MC1-10           Item no.: **381518 0010** \*  
MC1-20           Item no.: **381518 0020** \*

\* incl. PAL PC and remote

Technical specifications subject to change.

## Characteristics

### MC-10

- Activation of any servo motors with brushes
- Start-up program "DcSetup"
- Technical specifications of the drive regulator refer to "drive regulator iMD10"

### MC-20

- Activation of any brushless servo motors
- Evaluation of hall signals
- Start-up program "AcSetup"
- Technical specifications of the drive regulator refer to "drive regulator iMD20"

## General Features

- Output max. 500W
- 32 Bit high performance RISC processor with 256 KByte flash
- User programme in CNC mode for up to 650 commands
- Processing of the program in CNC or DNC mode
- Programming with PAL-PC (CNC mode), @-format (CNC mode), ProNC, Remote (DNC mode)
- LC Display with 4 rows a' 20 symbols (freely programmable)
- USB Interface (OTG to load for user programs from USB stick
- additional control signals (start, stop) adaptable
- Connection for incremental encoder
- 6 (8) Relay outputs (24 V DC, 300 mA)
- 8 Relay outputs (24 V DC / 700 mA)
- Stop category 0 acc. to EN60204
- Emergency OFF via connector in superordinated safety circuits can be integrated
- Broadrange power input: 115VAC/230VAC, 50..60Hz
- Table housing W 204 x H 149 x D286

## Servo controller

## iMC-V



Figure:  
Face and rear side  
Servo controller iMC-V

### General

The CAN controllers of the iMC-V series are compact, high-performance drive controls for 2 to 6 DC servo motors at an ideal price/performance ratio.

The shapely table housing integrates all control components that are required to solve a multitude of automation tasks. They comprise of final stages, to I/O components to safety control. In addition, a 26cm (10.2") touchscreen TFT display and a keyboard is integrated, which allows for a comfortable operation.

A CANopen-PCI card is integrated in the control computer as interface. This serves as CAN master for the drive regulator and the I/O component. In addition, external expansion of up to 128 CAN nodes are possible without problems.

The NC control core allows interpolation of up to 6 axes (linear, circular and helix), as well as online and lock-ahead track processing. During the use of the ProNC software, individual axes can be controlled as handling axes (next to the interpolated axes).

All final stages have an automatic jolt limitation and a zero speed monitoring (up to safety category 3).

### Ordering information

2 Axes controller iMC-V2	Item no.: <b>354000 2020*</b>
3 Axes controller iMC-V3	Item no.: <b>354000 2030*</b>
4 Axes controller iMC-V4	Item no.: <b>354000 2040*</b>
5 Axes controller iMC-V5	Item no.: <b>354000 2050*</b>
6 Axes controller iMC-V6	Item no.: <b>354000 2060*</b>

\* incl. PAL PC and remote

### Characteristics

- Sturdy table housing
- Control of 2 to 6 axes
- NC control via CANopen Fieldbus
- 4 Quadrant drive regulator (iMD20)
  - short scan times
  - evaluation for incremental encoder
  - idleness monitoring
  - differential protection
  - overvoltage and undervoltage protection
  - excess temperature protection
- Power supply 1,000 W / 48 V
- Broadrange power input:  
115 V AC / 230 V AC, 50...60 Hz
- Safety control
  - up to safety category 3
  - door circuit control
  - spindle control
- I/O component
  - 16 x digital inputs
  - 8 x digital outputs
  - 1 analog output
- Integrated control computer on Windows® basis with
  - CANopen PCI card
  - Driver software for CNC control
- Software: Remote, ProNC (optional)  
CAD/CAM software (optional)
- Table housing  
W 530 x H 210 x D 365 mm

#### Option:

- without TFT display and keyboard

Technical specifications subject to change.

# Servo controller

# iMC-VP



Figure:  
Face and rear side  
Servo controller iMC-VP

## General

The CAN controllers of the iMC-VP series are compact, high-performance drive controls for 2 to 6 DC servo motors at an ideal price/performance ratio. By using high performance and directly from the mains powered drive regulator iMD 40, this controller especially finds use where higher performances are required.

The shapely table housing integrates all control components that are required to solve a multitude of automation tasks. They comprise of final stages, to I/O components to safety control. At the front, a 26cm (10") touchscreen TFT display and a keyboard is integrated, which allows for comfortable operation.

A CANopen-PCI card is integrated in the control computer as interface. This serves as CAN master for the drive regulator and the I/O component. In addition external expansion of up to 128 CAN nodes are possible without problems.

The NC control core allows interpolation of up to 6 axes (linear, circular and helix), as well as online and lock-ahead track processing. During the use of the Pro-NC software, individual axes can be controlled as handling axes (next to the interpolated axes).

All final stages have an automatic jolt limitation and a zero speed monitoring (up to safety category 3).

## Ordering information

2 Axes controller iMC-VP2	Item no.: <b>354001 2020*</b>
3 Axes controller iMC-V3	Item no.: <b>354001 2030*</b>
4 Axes controller iMC-V4	Item no.: <b>354001 2040*</b>
5 Axes controller iMC-VP5	Item no.: <b>354001 2050*</b>
6 Axes controller iMC-VP6	Item no.: <b>354001 2060*</b>

\* incl. PAL PC and remote

Technical specifications subject to change.

## Characteristics

- Sturdy table housing
- Control of 2 to 6 axes
- NC control via CANopen Fieldbus
- 4 Quadrant drive regulator (iMD40)
  - short scan times
  - evaluation for incremental encoder
  - idleness monitoring
  - differential protection
  - overvoltage and undervoltage protection
  - excess temperature protection
- Mains-operated, intermediate circuit voltage 310 V
- Supply voltage: 230 V AC, 50 Hz
- Safety control
  - up to safety category 3
  - door circuit control
  - spindle control
- I/O component
  - 16 x digital inputs
  - 8 x digital inputs
  - 1 analog output
- Integrated control computer on Windows®-basis with
  - CANopen PCI card
  - Driver software for CNC control
- Software: Remote
- Table housing  
W 530 x H 250 x D 375 mm

### Options:

- 3-phase mains supply
- without TFT display and keyboard