# Single axis controller MC1-10/20/40

iMD single axis controller for isel linear units



# General

MC 1 series servo-controllers are freely-programmable compact controllers for linear or rotating units with servomotors. The single axis controllers integrate all the components (interfaces, motion controller, power supply, drive controller, safety circuit, control elements) needed for axis control in compact bench housings. The supplied PAL-PC software can be used for programming

#### There are three MC1 variants available:

- MC1-10: for controlling brush-type DC servomotors (48 V)
- MC1-20: for controlling brushless EC servomotors (48 V)
- MC1-40: for controlling brushless EC servomotors (310 V)

## Ordering information

MC 1-10	(including	PAL-PC)
MC 1-20	(including	PAL-PC)
MC 1-40	(including	PAL-PC)

Part no.: 38d1518 0010 Part no.: 381518 0020 Part no.: 381518 0040

Part no.: 392760 xxxx\*

Part no.: 392307 xxxx\*

Part no.: 392740 xxxx\*

Motor leads MC 1-10/20 Motor leads MC 1-40

Encoder lead

\* Leads available in different lengths, e.g.:  $0100 = 1 \text{ m} / 0150 = 1.5 \text{ m} / 0200 = 2 \text{ m} \dots / 1000 = 10 \text{ m}$ 

Technical specifications subject to change

made by **isel**°

## Features

#### MC1-10

- For controlling brush-type servomotors with an intermediate circuit voltage of 48 V DC
- Setup program "DcSetup"

#### MC1-20

- For controlling brushless servomotors with an intermediate circuit voltage of 48 V DC
- Analysis of Hall signals
- Setup program "AcSetup"

#### MC1-40

- For controlling brushless servomotors with an intermediate circuit voltage of 310V DC
- Analysis of Hall signals
- Setup program "AcSetup"

### **Common features**

- Max. output power 500 W (MC1-10, MC1-20)
- 32-bit high performance RISC processor with 256 kB Flash memory
- User program in CNC mode for up to 650 commands
- Processing of the program in CNC or DNC mode
- Programming with PAL-PC (CNC and CNC mode), @-format (CNC mode), ProNC, Remote (DNC mode)
- LC display with 4 lines, each with 20 characters (freely programmable)
- Additional control signals (Start, Stop) adaptable
- Connection for incremental encoder
- 6(8) signal inputs (24 V DC)
- 8 relay outputs (24 V DC/700 mA)
- Stop category 0 in accordance with EN60204
- Emergency shutdown circuit via plug in higher level safety circuit integrable
- Broadband mains supply: 110...250 V AC, 50..60 Hz (MC1-10 / MC1-20)
- 250 V AC, 50Hz (MC1-40)
- Bench casing
- W 204 imes H 149 imes D286

# Scope of delivery

- Controller
- Mating plug (I/O, pulse, remote)
- Serial interface lead (SubD9 - RJ 45)
- 230V AC mains lead
- PAL-PC software CD
- Operating instructions
- Programming instructions

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