

# Motion Controllers

## V2.5, 4-Quadrant PWM with RS232 or CAN interface

### MCDC 3003 P

Values at 22°C		MCDC 3003 P	
Power supply electronic	$U_B/U_{EL}$	12 ... 30	V DC
Power supply motor <sup>1)</sup>	$-/U_B$	0 ... 30	V DC
PWM switching frequency	$f_{PWM}$	78,12	kHz
Efficiency electronic	$\eta$	95	%
Max. continuous output current	$I_{cont}$	3	A
Max. peak output current <sup>2)</sup>	$I_{max}$	10	A
Standby current for electronic (at $U_B=24V$ )	$I_{el}$	0,06	A
Operating temperature range		-40 ... +85	°C
Mass		18	g

<sup>1)</sup> Only available for option 3085 (separate power supply)

<sup>2)</sup> S2 mode for max. 2s

Interfaces	MCDC 3003 P RS	MCDC 3003 P CO
Interface	RS232	CAN (CiA)
Protocol	FAULHABER - ASCII	CANopen

#### Basic features

- Operation of brushed DC-Micromotors
- Supported sensor systems: incremental encoders
- Positioning resolution per revolution depending on the used encoder type
- Max. 5 digital inputs, max. 1 digital output, 1 analog input. Not all I/Os available depending on wiring
- Setpoint specification via fieldbus, quadrature signal, pulse and direction or analog inputs
- Optional stand-alone operation via application programs with the RS232 interface version

#### Range of functions

Operating modes (RS Versions)	Position, speed and torque control with setpoint specification via interface or analog. Position control with Gearing Mode or stepper motor operation. Operation as Servo Amplifier in voltage controller mode
Operating modes (CO Version)	Profile Position Mode (PP), Profile Velocity Mode (PV), Homing Mode.
Speed range	5 min <sup>-1</sup> ... 30 000 min <sup>-1</sup>
Application programs	Available in versions with RS232 interface
Additional functions	Overload protection for electronics and motor, self-protection from overheating, over-voltage protection in generator mode.
Indicator	Trace as logger
Motor types	Brushed DC-Micromotors with incremental encoders

