

Motion Controllers

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

MCLM 3002 F

Values at 22°C

| | MCLM 3002 F |
|--|-----------------------|
| Power supply electronic | U_B/U_{EL} 8 ... 30 |
| Power supply motor ¹⁾ | $-/U_B$ 0 ... 30 |
| PWM switching frequency | f_{PWM} 78,12 |
| Efficiency electronic | η 95 |
| Max. continuous output current | I_{cont} 2 |
| Max. peak output current ²⁾ | I_{max} 3 |
| Standby current for electronic (at $U_B=24V$) | I_{el} 0,04 |
| Operating temperature range | -25 ... +85 |
| Housing material | Hotmelt |
| Mass | 13 |

¹⁾ Only available for option 3085 (separate power supply)

²⁾ S2 mode for max. 5s

| Interfaces | MCLM 3002 F RS | MCLM 3002 F CO |
|------------|-------------------|----------------|
| Interface | RS232 | CAN (CiA) |
| Protocol | FAULHABER - ASCII | CANopen |

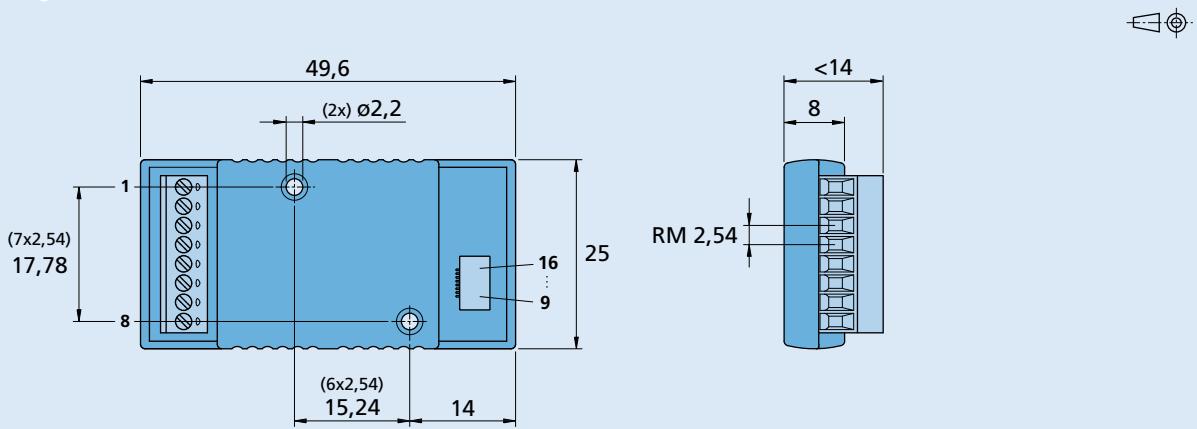
Basic features

- Operation of brushless linear DC-Servomotors
- Supported sensor systems: analog Hall sensors
- Positioning resolution when using analog Hall sensors as position encoder: 3000 increments per revolution
- Max. 3 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. Cyclic Synchronous Position Mode (CSP) acc. to IEC 61800-7-201 or IEC 61800-7-301. |
| Velocity range | 2 mm/s ... 10 000 mm/s |
| 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 | Brushless Linear DC-Servomotors with analog Hall sensors |

Dimensional drawing



MCLM 3003 E

Connector Information

Options and connection information

Example product designation: **MCLM 3002 E BS 3085**

Product combination

| Product combination | | | |
|-----------------------|--|--|--|
| Linear DC-Servomotors | Cables / Accessories | | |
| LM 0830 ... 01 | To view our large range of accessory parts, please refer to the „Accessories“ chapter. | | |