



MC800

Universal motion controller for applications up to 2 axes

Product Features

- Suitable for various applications of drive technology, e.g.: Synchronization Control, Index and Print Mark Evaluation Control, Rotating Cross Cutter Control, Flying Saw Control, Eccentric Shear Control, Label Printing Machine Control, etc.
- Interface modules (optional), CANopen, CC-Link, DeviceNet, EtherCAT, Modbus TCP, PROFIBUS, PROFINET, SERCOS-III
- Free assignment of the control axis and index or print mark inputs
- New included control loop enables to run torque loop applications
- Tandem Drive Control

Technical Specification:

Power supply:	Input voltage: Protection circuit: Consumption: Connections:	18 ... 35 VDC reverse polarity protection approx. 250 mA (unloaded) screw terminal, 1.5 mm ² / AWG 16
Encoder supply:	Output voltages: Output current: Protection circuit:	2 x 5.2 VDC and 2 x 16 ... 33 VDC (input voltage minus ca. 2 V) 5.2 VDC max. 150 mA (per terminal) / 16... 33 VDC max. 150 mA (per terminal) reverse polarity protection
SinCos inputs:	Number of inputs: Amplitude: DC offset: Frequency: Connections:	2 0.8 ... 1.2 Vpp 1.8 ... 3.1 VDC max. 400 kHz SUB-D (male) connectors, 9-pin
Incremental inputs:	Number of inputs: Format: Frequency: Differential voltage: Connections:	2 RS422 (differential signal A, /A, B, /B, Z, /Z) max. 2 MHz > 1 VDC screw terminals, 1.5 mm ² / AWG 16
Control inputs:	Number of inputs: Application: Signal level: Pulse width: Input resistance: Connections:	4 fast interrupt-inputs (light barriers, photocells, ...) HTL PNP/NPN: LOW 0 ... 2.5 V, HIGH 10 ... 30 V min. 4 µs R _i ≈ 3 kOhm screw terminal, 1.5 mm ² / AWG 16
	Number of inputs: Application: Signal level: Pulse width: Input resistance: Connections:	4 control inputs HTL PNP: LOW 0 ... 2.5 V, HIGH 10 ... 30 V min. 1 ms R _i ≈ 10 kOhm screw terminal, 1.5 mm ² / AWG 16

Technical Specification:		
SSI inputs: (on request)	Number of inputs: SSI-Mode: Frequency: Resolution: Format: Connections:	2 Master and Slave 100 Hz ... 1 MHz 13 ... 32 Bit RS422, also selectable as pulse input 2 x A, /A, B, /B screw terminals, 1.5 mm ² / AWG 16
Analog inputs:	Number of inputs: Current input: Voltage input: Reference voltage: Resolution: Accuracy: Delay period: Connections:	2 0 ... 20 mA / 4 ... 20 mA (load max. 150 Ohm) or -10 ... +10V / 0 ... 10 V (R _i ≈ 100 kOhm) 4.096 VDC (to connect linear potentiometers) 14 Bit (±13 Bit) 0.1 % < 1 ms screw terminal, 1.5 mm ² / AWG 16
Incremental outputs:	Channels: Frequency: Differential voltage: Output current: Connections:	A, /A, B, /B, Z, /Z (differential signal) max. 500 kHz 3.5 ... 30 VDC (depends „Com+“ input level) 30 mA each channel screw terminal, 1.5 mm ² / AWG 16
Control outputs:	Number of outputs: Output voltage: Output current: Output Driver: Protective circuit: Delay period: Connections:	4 5 ... 30 VDC (depends „Com+“ input level) max. total 350 mA push-pull short-circuit-proof < 1 ms screw terminal, 1.5 mm ² / AWG 16
Analog outputs:	Number of outputs: Voltage output: Current output: Resolution: Accuracy: Delay period: Protective circuit: Connections:	2 -10 ... +10V / 0 ... 10 V (load max. 2 mA) or 0 ... 20 mA / 4 ... 20 mA (load max. 270 Ohm) 14 Bit (±13 Bit) 0.1% < 1 ms short-circuit-proof screw terminal, 1.5 mm ² / AWG 16
Serial interface:	Format: Data transmission: Baud rate: Protocol: Connection:	RS232 or RS485 (only one can be used at the same time) asynchronous 2400 ... 38400 Lecom protocol (extended addressing) SUB-D female, X11, 9-pin
USB-interface:	Version: Connections:	USB 2.0 USB-B (female)
Ethernet / TCP / IP:	Standard: Transmission rate: Parameterization: Connections:	IEEE 802.3 10 ... 100 Mbps Half / Full Duplex RJ45 (female)
Interface module: (optional)	Ethernet Interface:	(In preparation / on request: EtherCAT, Ethernet/IP, Modbus TCP, Powerlink, PROFINET, SERCOS-III)
	Fieldbus Interface (Slave):	CANopen, Modbus RTU, Profibus DPV1 (In preparation / on request: CC-Link, DeviceNet)
Display:	Number of LED's: Green LED: Yellow LED: Yellow LED:	3 Ready for operation „ON“ Status 1 Status 2
Switches:	DIL-switch:	3-pin
Conformity and standards:	EMC 2014/30/EU: RoHS (II) 2011/65/EU RoHS (III) 2015/863:	EN 61326-1: 2013 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 Class A EN IEC 63000: 2018
Housing:	Material: Mounting: Dimensions (w x h x d): Weight: Protection class:	plastic to 35 mm top hat rail (according to EN 60715) 50 x 160 x 160 mm / 1.969 x 6.299 x 6.299 inch ca. 450 gram IP20
Ambient temperature:	Operating: Storage:	0 °C ... +60 °C / +32 °F ... +140 °F (not condensing) -25 °C ... +70 °C / -13 °F ... +158 °F (not condensing)
Ambient conditions:	Altitude: Humidity: Pollution Degree:	max. 2000 m (6560 ft) above sea level max. 80% relative humidity up to 30°C / 86°F 2