

Servo drive

CMMT-ST-C8-1C-MP-S0

Part number: 8163946

FESTO



Data sheet

Feature	Value
Type of mounting	Mounting plate, screwed on With H-rail
Mounting position	Free convection Vertical
Product weight	350 g
Display	LED green/yellow/red
Certification	RCM compliance mark c UL us - Listed (OL)
CE marking (see declaration of conformity)	As per EU EMC directive as per EU machinery directive As per EU RoHS directive
Storage temperature	-25 °C...55 °C
Ambient temperature	0 °C...50 °C
Note on ambient temperature	Observe derating with regard to assembly distance and output current.
Relative air humidity	5 - 90 % Non-condensing
Max. installation height	2000 m
Degree of protection	IP20
Overvoltage category	I
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III
Max. DC link voltage	60 V
Nominal voltage, logic supply DC	24 V
Permissible range of logic voltage	± 15 %
Max. current consumption for logic supply without clamping brake	1 A
Nominal current per phase, effective	8 A
Peak current per phase, effective	20 A
Max. peak current duration	3 s
Controller nominal power	300 W
Peak power	800 W

Feature	Value
Controller operating mode	Cascade control P position controller PI speed controller PI current regulator for F or M Profile operation with block mode and direct mode Interpolating mode via fieldbus Synchronous operating modes Reference travel Setup mode Autotuning Open-loop operation
Mode of operation	Field-oriented regulation Position resolution 24 bit/rev. Real-time data acquisition 2x input capture (x, v, F) 2x output trigger (x, v, F) 1x position sensor input Sampling rate 16 or 20 kHz PWM with 16 or 20 KHz
Adjustable current reduction	Via software
Nominal current setting	Via software
Ethernet interface, function	Parameterization and commissioning
Ethernet interface, protocol	TCP/IP
Fieldbus interface, protocol	EtherCAT EtherNet/IP PROFINET IRT
Fieldbus coupling	EtherCAT EtherNet/IP Modbus®/TCP PROFINET
Communication profile	CiA402 CoE (CANopen over EtherCAT) EoE (Ethernet over EtherCAT) FoE (File over EtherCAT) PROFIdrive
Process interfacing	I/O mode for 256 positioning blocks Interpolated mode CSP Interpolated mode CST Interpolated mode CSV
Fieldbus interface, connection type	2x socket
Fieldbus interface, connection technology	RJ45
Encoder interface, function	BiSS-C Incremental encoder
Number of digital logic inputs	6
Input switching logic	PNP (positive switching)
Characteristics of logic input	Freely configurable in some cases Safety inputs in some cases Not galvanically isolated
Work range of logic input	-3 V...30 V
Number of high-speed logic inputs	2
Time resolution of high-speed logic inputs	1 µs
Number of digital logic outputs 24 V DC	2
Characteristics of digital logic outputs	Not galvanically isolated
Max. current of digital logic outputs	100 mA
Number of high-speed switching outputs	2
Time resolution of high-speed switching outputs	1 µs
Number of floating switching outputs	1
Max. current of the floating switching outputs	100 mA
Safety integrity level (SIL)	STO / SIL 2 / SILCL 2 (EC motor without diagnostics) STO / SIL 3 / SILCL 3 (stepper motor/EC motor with diagnostics)
Performance Level (PL)	STO: cat. 3 PLd (EC motor without diagnostics) STO/cat. 3, PLe (stepper motor/EC motor with diagnostics)

Feature	Value
Proof test interval	STO / 20 a (stepper motor/EC-motor without diagnostics) STO / 0.25 a (EC motor with diagnostics)
Number of safe 2-pin inputs	1
Number of diagnostic outputs	1