

Servo drive

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

Part number: 8163946

FESTO



Data sheet

Feature	Value
Type of mounting	Mounting plate, attached with screws With H-rail
Mounting position	Free convection Vertical
Product weight	350 g
Display	Green/yellow/red LED
Approval	RCM trademark c UL us listed (OL)
CE mark (see declaration of conformity)	To EU EMC Directive To EC Machinery Directive In accordance with EU RoHS Directive
Storage temperature	-25 °C...55 °C
Ambient temperature	0 °C...50 °C
Note on ambient temperature	Observe the derating regarding the mounting clearance 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. intermediate circuit voltage DC	60 V
Nominal voltage for logic power supply DC	24 V
Permissible range for logic voltage	± 15 %
Current consumption of logic power 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 output	300 W
Maximum output	800 W

Feature	Value
Controller operating mode	Cascade controller P position controller PI speed controller PI current regulator for F or M Profile operation with record and direct mode Interpolated mode via fieldbus Synchronised operating modes Homing Setting-up Autotuning Open-loop operation
Operating mode of drive unit	Field-oriented closed-loop control Position resolution 24 bit/rev Real-time data acquisition 2x input capture (x, v, F) 2x output trigger (x, v, F) 1x position encoder 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	Parameterisation and commissioning
Ethernet interface, protocol	TCP/IP
Field bus, protocol	EtherCAT® EtherNet/IP PROFINET IRT
Fieldbus link	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 records Interpolated mode CSP Interpolated mode CST Interpolated mode CSV
Field bus, connection type	2x socket
Field bus, connection system	RJ45
Encoder interface, function	BiSS-C Incremental encoder
Number of digital logic inputs	6
Switching logic for inputs	PNP (positive switching)
Features of logic input	Freely configurable in some cases Safety inputs in some cases Not galvanically isolated
Working 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
Features of digital logic outputs	Not galvanically isolated
Max. current 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, PLc (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