Controller CMXH-ST2-C5-7-DIOP Part number: 3605478

FESTO



Data sheet

Feature	Value
Type code	СМХН
Ambient temperature	0 °C 50 °C
Type of mounting	On H-rail with accessories With screws in slots
Product weight	700 g
CE marking (see declaration of conformity)	As per EU EMC directive as per EU machinery directive
Certification	RCM compliance mark
Degree of protection	IP20
Storage temperature	-25 °C 75 °C
Note on materials	RoHS-compliant
Relative air humidity	0 - 90 % Non-condensing
Fieldbus coupling	1x CANopen slave
Electrical connection technology I/O	Socket, Sub-D, 15-pin
Number of digital logic inputs	8
Number of digital logic outputs 24 V DC	5
Information on digital logic inputs/outputs	Digital logic inputs/outputs are only available in I/O mode.
Bus connection	Plug 9-pin Sub-D
Controller operating mode	Direct operation Block selection
Process interfacing	For 31 blocks
Nominal voltage, logic supply DC	24 V
Permissible range of logic voltage	± 15 %
Nominal voltage, load supply DC	48 V
Note on nominal operating voltage of DC load voltage supply	Alternatively, 24 V also possible.
Load supply permissible range	± 10 %
Max. current consumption for logic supply without clamping brake	0.2 A
Max. current consumption for logic supply with clamping brake and I/O	0.9 A
Braking resistor	15 Ohm
Note on braking resistor	Integrated braking resistor
Line filter	Integrated
Nominal current load supply	10 A
Permissible load current	12 A
Current rating per output	100 mA

Feature	Value
Power failure buffering	10 ms
Information on power failure buffering	The 10 ms value is not achieved when a brake is integrated.
Status indications	7-segment display LED
Ethernet, number	1
Ethernet, supported protocols	TCP/IP, Modbus® TCP
Resistance to vibration	EN 60068-2-6
Resistance to shock	EN 60068-2-27
Protection class	III
Total number of axes	2
Activation methods	I/O standalone CAN bus TCP/IP
Communication profile	FHPP
Max. fieldbus transmission rate	100 Mbit/s
Information on max. fieldbus transmission rate	1 Mbit/s for CANopen
Supported kinematics systems	Planar surface gantry EXCM
Programming software	FCT (Festo Configuration Tool)
Dimensions W x L x H	50 mm x 149 mm x 130 mm
Device-specific diagnostics	Diagnostic memory Short circuit in motor winding Undervoltage/overvoltage System and motor-oriented diagnostics
Configuration support	FCT (Festo Configuration Tool)
Parameterization	System parameter
Protocol	CANopen FHPP Modbus® TCP
Ethernet interface	RJ 45 (socket, 8-pin)
LED display (bus-specific)	Device: operating status Com: communication status
LED display (product-specific)	POWER: load voltage applied
Safety function	Safe torque off (STO)
Performance Level (PL)	Safe torque off (STO)/category 3, performance level e
Safety integrity level (SIL)	Safe torque off (STO)/SIL 3
Certificate issuing authority	01/205/5519.00/16 German Technical Control Board (TÜV) Rheinland
Proof test interval	20 y
Diagnostic coverage	90 %
SFF safe failure fraction	99 %
Certified for safety functions to ISO 13849 (PL)	Product can be used in safety-related parts of control systems up to category 3, PL e
Certified for safety function to ISO 13849 and IEC 61508 (SIL)	Product can be used in safety-related parts of control systems up to SIL 3, high demand
Probability of Dangerous Failure per Hour (PFHd)	2.0E-9
MTTFd	STO/5700 years
Duration of use Tm	20 y
Hardware fault tolerance	1
Characteristics of digital logic outputs	Not galvanically isolated