

Control block CPX-CM-HPP



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Key features

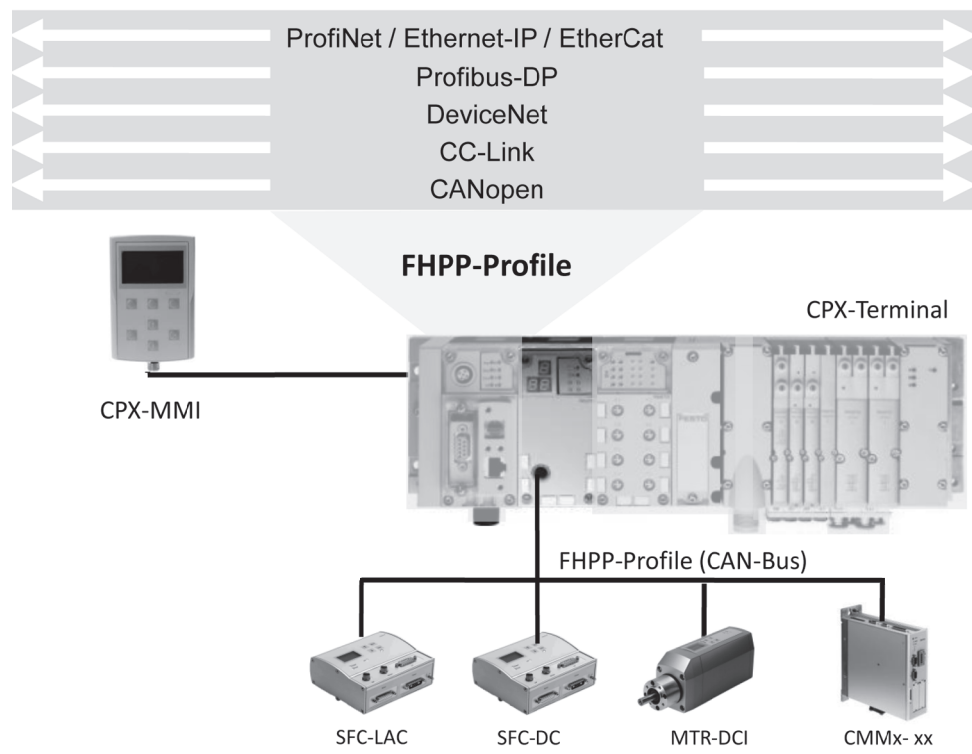
New options for controlling drive technology

The control block CPX-CM-HPP makes all of Festo's electric drive technology compatible with all industrial communication interfaces.

CPX-CM-HPP is controlled using a CPX fieldbus node by a higher-level controller or front end controller in the CPX terminal.

Communication with the drives is standardised via the Festo Handling and Positioning Profile (FHPP). The control component is therefore independent of the fieldbus node used.

A maximum of four individual electric axes can be connected via CAN bus.



Advantages for users

More options

All electric drives from Festo can be controlled via the CPX terminal using the control block CPX-CM-HPP. The control block therefore offers a simple, flexible and cost-effective way of controlling individual axes.

Simple

- No programming required.
- Quick configuration and diagnostics via the operator unit CPX-MMI.
- Easy control of electric drives via CAN bus with the Festo Handling and Positioning Profile (FHPP).

Flexible

- Compatibility with all control systems via the fieldbus node of the CPX terminal.
- All electric drive systems from Festo are uniformly controlled with FHPP.

Cost-effective

- CPX-CM-HPP offers a cost-effective fieldbus interface via CAN bus for up to four electric axes.
- Cost advantages compared with I/O solutions in systems with as few as two electric axes.

Note
Choose the control block CPX-CMXX for coordinated multi-axis movements.

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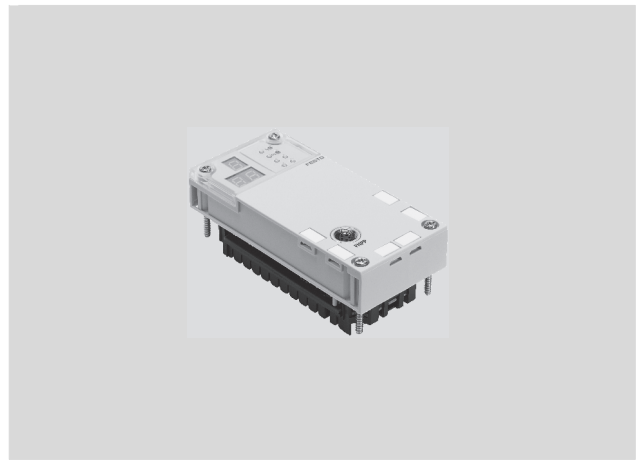
Technical data

The control block CPX-CM-HPP is a module in the CPX terminal for controlling electric drives.

The control component is independent of the fieldbus node used. This means that Festo's electric drive technology is compatible with all industrial communication interfaces.

The control block does not need to be programmed.

- Max. 4 individual electric axes can be controlled via CAN bus
- No programming required
- Standardised communication with the drives via the Festo Handling and Positioning Profile (FHPP)
- Quick configuration and diagnostics via the operator unit CPX-MMI
- Simple, flexible and cost-effective



General technical data	
Fieldbus interface	1x socket M9, 5-pin
Protocol	FHPP
Max. address volume for inputs [byte]	32
Max. address volume for outputs [byte]	32
LED display (product-specific)	Error: Error PL: Power supply
Device-specific diagnostics	Diagnostic memory Channel and module-oriented diagnostics Undervoltage/short circuit of modules
Parameterisation	Forcing of channels System parameters
Configuration support	Operator unit CPX-MMI
Total number of axes	4
Nominal operating voltage [V DC]	24
Operating voltage range [V DC]	18 ... 30
Power failure buffering [ms]	10
Intrinsic current consumption at nominal operating voltage [mA]	Typically 80
Protection class to EN 60529 (plug connector plugged in)	IP65/IP67
Dimensions W x L x H (incl. interlinking block) [mm]	50 x 107 x 55
Product weight (without interlinking block) [g]	140
Materials	
Housing	PA, reinforced PC
Note on materials	RoHS-compliant

Control block CPX-CM-HPP

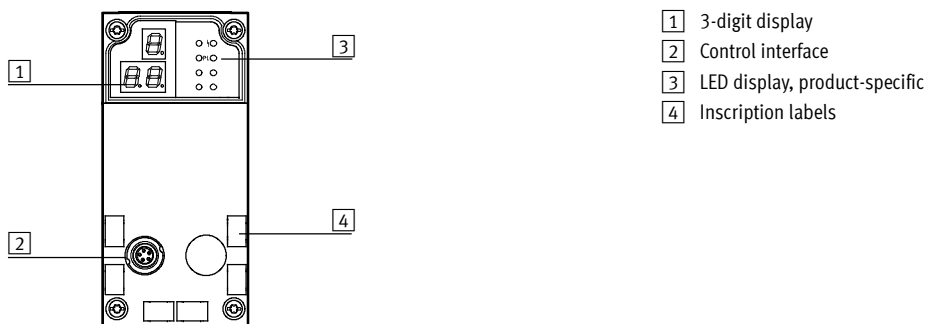
Technical data

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Technical data – Interfaces		
Interface		
Control interface	CAN bus	
Baud rate	[Mbps]	1

Operating and environmental conditions		
Ambient temperature	[°C]	-5 ... +50
Storage temperature	[°C]	-20 ... +70
CE mark (see declaration of conformity)	To EU Low Voltage Directive	

Connection and display components



- 1 3-digit display
- 2 Control interface
- 3 LED display, product-specific
- 4 Inscription labels

Pin allocation – Control interface			
	Pin	Signal	Meaning
Plug M9, 5-pin			
	1	n.c.	Not connected
	2	n.c.	Not connected
	3	CAN_GND	CAN ground
	4	CAN_H	CAN high
	5	CAN_L	CAN low
	Housing	Screened	Cable screen must be connected to functional earth (FE)

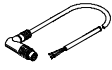
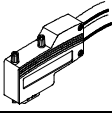
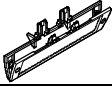
Permissible CPX modules		
CPX module	Protocol	Remarks
CPX-FEC	–	Revision 16 (R16) and above
CPX-CEC-...	–	In preparation
CPX-FB6	Interbus	Not available
CPX-FB11	DeviceNet	Revision 22 (R22) and above
CPX-FB13	Profibus DP	Revision 23 (R23) and above
CPX-FB14	CANopen	Revision 24 (R24) and above
CPX-FB23	CC-Link	In preparation
CPX-FB32	Ethernet/IP	In preparation
CPX-FB33, FB34, FB35	ProfiNet	In preparation
CPX-FB38	EtherCAT	In preparation


Ordering data			
Designation	Part No.	Type	
	Control block	562214	CPX-CM-HPP

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Accessories



Ordering data – Bus connection				
Designation		Cable length [m]	Part No.	Type
	Connecting cable	2	563711	NEBC-M9W5-K-2-N-LE3
		5	563712	NEBC-M9W5-K-5-N-LE3
	Plug for CAN bus interface, Sub-D, 9-pin, without terminating resistor		533783	FBS-SUB-9-WS-CO-K
	Inscription label holder for manifold block		536593	CPX-ST-1

Documentation				
Designation		Language	Part No.	Type
	Manual – Control block CPX-CM-HPP	German	568683	P.BE-CPX-CM-HPP-DE
		English	568684	P.BE-CPX-CM-HPP-EN