



Key features

New options for controlling drive technology

Higher-order controller



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 bus node, by a higher-order controller or via a 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 bus node used. A maximum of 4 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.

Easy

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

Flexible

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

Cost effective

The CPX-CM-HPP offers a cost-effective fieldbus interface via CAN bus for up to 4 electric axes.

• Cost advantages compared with I/O solutions even for systems with just 2 electric axes.

Datasheet

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

The control component is independent of the bus 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.

General technical data

•	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 CPX-FMT
- Simple, flexible and cost-effective



Fieldbus interface		1x socket M9, 5-pin
Protocol		FHPP
Max. address volume inputs	[byte]	32
Max. address volume for outputs	[byte]	32
LED display (product-specific)		Error
		PL: Load supply
Device-specific diagnostics		Diagnostics memory
		Channel and module-oriented diagnostics
		Undervoltage/short circuit of modules
Parameterisation		Forcing of channels
		System parameters
Configuration support		MMI handheld terminal
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 op-	[mA]	Typically 80
erating voltage		
Degree of protection		IP65
		IP67
Dimensions W x L x H	[mm]	50 x 107 x 55
(including interlinking block)		
Product weight	[g]	140
(without interlinking block)		

Technical data – Interfaces

Interface		
Control interface		CAN bus
Baud rate	[Mbps]	1

Materials

Housing	Reinforced PA
	PC
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions

1 0		
Ambient temperature	[°C]	-5+50
Storage temperature	[°C]	-20 +70
CE marking (see declaration of conformity) ¹⁾		To EU Low Voltage Directive

1) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... -> Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

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	
Socket M9, 5-pin				
<u>∕</u> 3	1	n.c.	Not connected	
2 4	2	n.c.	Not connected	
$\left(\circ \circ \right)$	3	CAN_GND	CAN Ground	
	4	CAN_H	CAN High	
	5	CAN_L	CAN low	
	Housing	Shielding	Cable shield must be connected to functional earth (FE)	

Permitted	bus	nodes	/CEC
-----------	-----	-------	------

Bus node/CEC	Protocol	Max. number of CPX-CM-HPP modules	
CPX-CEC	_	0	
CPX-FB11	DeviceNet [®]	2	
CPX-FB13	PROFIBUS	2	
CPX-FB14	CANopen	1	
CPX-FB23-24	CC-Link	1 (as function module F23)	
		0 (as function module F24)	
CPX-FB36	EtherNet/IP	2	
CPX-FB37	EtherCAT®	2	
CPX-FB39	Sercos III	2	
CPX-FB40	POWERLINK	2	
CPX-FB43	PROFINET RT, M12	2	
CPX-M-FB44	PROFINET RT, RJ45	2	
CPX-M-FB45	PROFINET RT, SCRJ	2	

Accessories

Ordering data Designation		Part no.	Туре
Control block			
	For controlling up to 4 electric drives via CAN bus	562214	СРХ-СМ-НРР

Ordering data – Bus connection

Designation			Part no.	Туре
Connecting cable				
	Connecting cable	2 m	563711	NEBC-M9W5-K-2-N-LE3
		5 m	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 labels			· · ·	
	Inscription label holder for connection block		536593	CPX-ST-1
User documentation				
	Manual – Control block CPX-CM-HPP	German	568683	CPX-CM-HPP-DE
		English	568684	CPX-CM-HPP-EN