

Operator unit CDSB

FESTO



Key features



Features

The operator unit CDSB-A1 from Festo is a plug-in display and control unit for the servo drive CMMT and the automation system CPX-E.

The integrated colour TFT display with touchscreen can be used both for operation and for simple diagnostics of the connected basic unit. User-friendliness is enhanced through fault diagnostics with plain-text error messages.

When plugged in, the resistive touchscreen can be used to set a range of parameters (depending on the basic unit). Diagnostic messages can be read and updates can be performed.

In the unplugged state, the CDSB can be connected to a PC using a mini USB connection. The device is detected by the PC as a mass storage device, and firmware files can then be written to it.

Functionality

- Universal operation on a range of basic units (CMMT or CPX-E)
- Compact size
- Colour touchscreen
- Diagnostic function
- Update function for basic unit (in plugged-in state)
- Power supply comes from the basic unit
- Mini USB interface
- Interface for basic unit (covered in plugged-in state)

Key features

Further information

Firmware update

A firmware update can be downloaded from the Festo Support Portal as required. After connecting the operator unit CDSB-A1 to a PC, the downloaded update must be saved in the "/Update" folder.

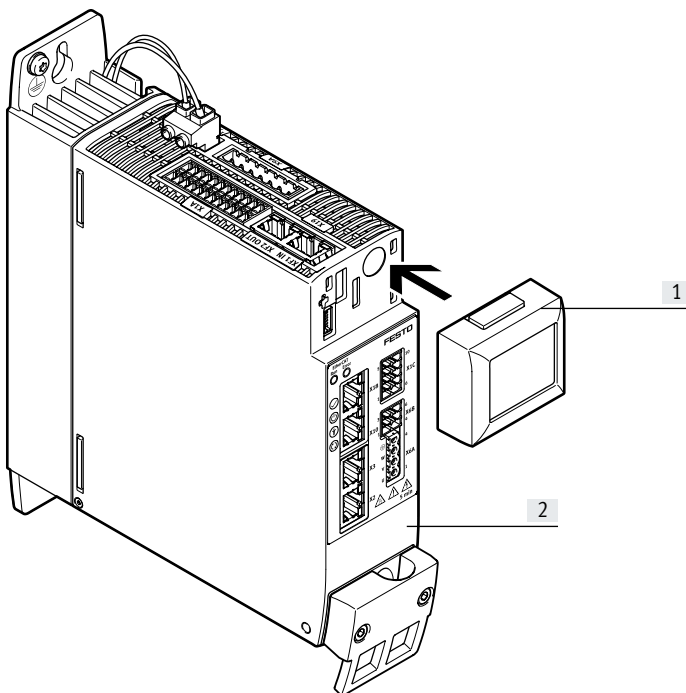
The update is started automatically after restarting the operator unit (Power off/on). The update can take up to 2 minutes. The operator unit will then automatically restart.

Operation of basic unit

If the operator unit CDSB-A1 is plugged into the basic unit, the display will be activated:

- If there is no connection to the basic unit (yet), "Loading data" appears
- Following successful connection, the user interface of the basic unit or the first menu item of the basic unit will be displayed immediately.
- A function can be selected within a menu level using the arrow keys (e.g. diagnostics)
- The arrow keys can be used to move from one menu level to another
- Fields that can be amended or that perform an action are highlighted in blue



Plugging the CDSB into the basic unit



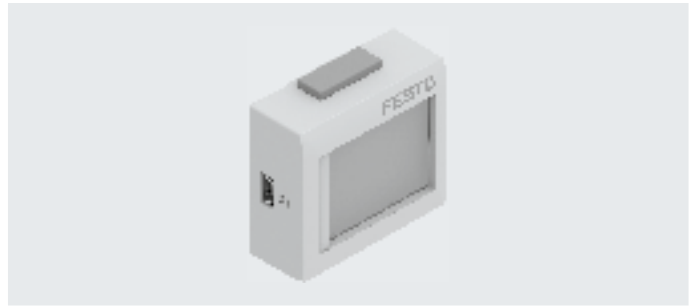
[1] Operator unit CDSB

[2] Basic unit, servo drive CMMT-AS

Data sheet

-  Voltage
4.5 ... 5.5 V DC
-  Temperature range
0 ... +60°C

- Scope of application:
- For servo drive CMMT-AS
 - For controller CPX-E-CEC of automation system CPX-E



General technical data

Area of application	Only with CMMT and CPX-E-CEC	
Display design	Touchscreen	
Display	TFT colour	
Display size	[inch]	1.77
Display resolution	[pixels]	128x160
Operating voltage range	[V DC]	4.5 ... 5.5
Max. current	[mA]	250
Typical current	[mA]	90
USB interface, connection technology	USB 2.0 type B mini	
Max. cable length	[m]	3
User memory	[GB]	3

Technical data – Mechanical components

Product weight	[g]	36.6
Dimensions W x L x H	[mm]	50 x 45 x 19.6

Materials

Housing	Reinforced PA6	
Note on materials	RoHS-compliant	
	Contains paint-wetting impairment substances	

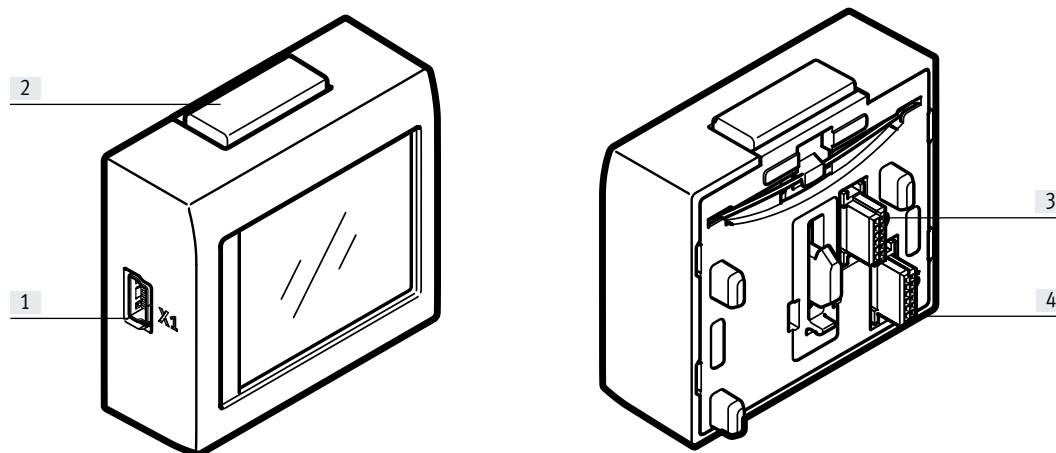
Operating and environmental conditions

Ambient temperature	[°C]	0 ... +60
Storage temperature	[°C]	-20 ... +70
Relative air humidity (at 60°C)	[%]	Max. 95
	Non-condensing	
CE marking (see declaration of conformity) ²⁾	To EU EMC Directive ¹⁾	
	To EU RoHS Directive	
Certification	RCM	
	KC EMC	
Degree of protection	IP20	

- 1) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/CDSB-A1 → 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.
- 2) Additional information: www.festo.com/sp → Certificates

Data sheet

Connection and display components



[1] USB interface (X1)

[2] Pushbutton for unlocking

[3] Interface for controller CPX-E-CEC (X9)

[4] Interface for servo drive CMMT-AS (X5)

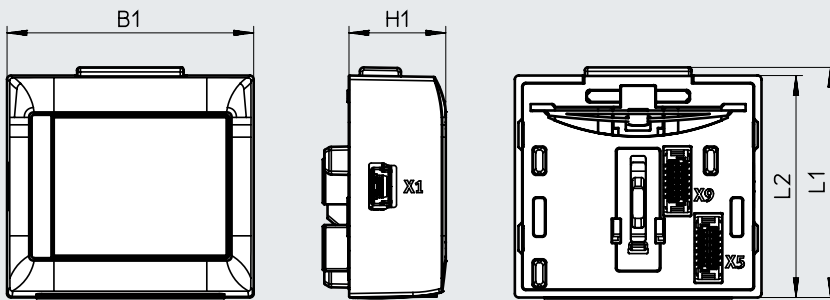
Interfaces		
Interface	Function	Description
X1	USB interface	The operator unit can be connected to a PC via the USB 2.0 type B mini interface. The operator unit is detected by the PC as a mass storage device.
X5	Interface to the basic unit	Interface for connection to the servo drive CMMT-AS
X9	Interface to the basic unit	Interface for connection to the controller CPX-E-CEC

Wiring allocation (socket view)		
	Pin	Allocation X1: USB 2.0 type B mini socket
	1	VBus
	2	Data -
	3	Data +
	4	n.c.
	5	GND

Data sheet

Dimensions

Download CAD data → www.festo.com



Type	B1	H1	L1	L2
CDSB-A1	50	19.6	46.6	46

Ordering data

		Part no.	Type
	Display and control unit for: <ul style="list-style-type: none"> • Servo drive CMMT-AS • Controller CPX-E-CEC 	8070984	CDSB-A1