

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.

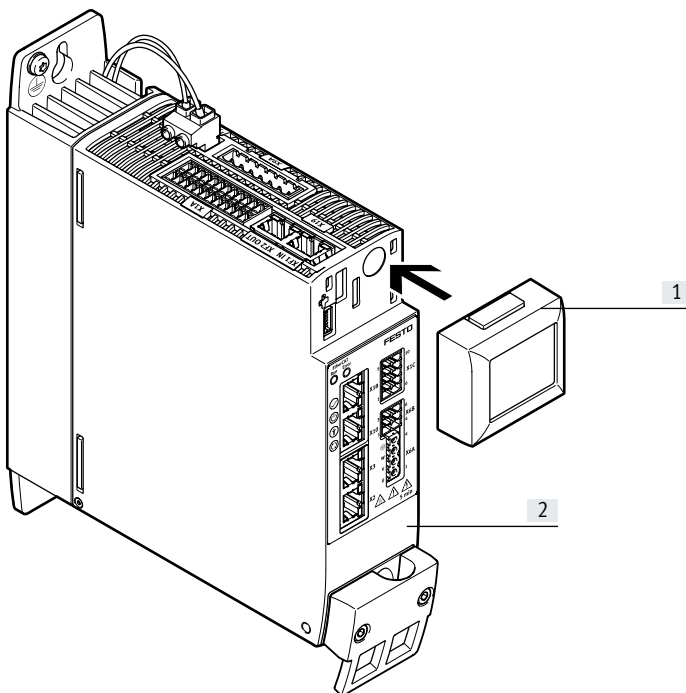
The update is started automatically after restarting the operator unit (Power off/on). The update can take up to 2 minutes. The operator unit will then automatically restart.

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



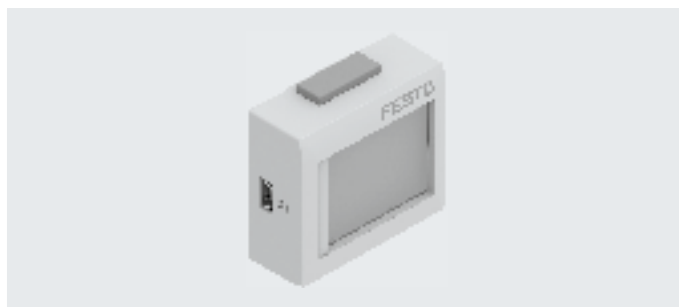
- [1] Operator unit CDSB
[2] Basic unit, servo drive CMMT-AS

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	
PWIS conformity	VDMA24364 zone III	
Note on materials	RoHS-compliant	

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	
UKCA marking (see declaration of conformity)	UK instructions for EMC	
	UK RoHS instructions	
Certification	RCM	
	KC EMC	
Degree of protection	IP20	

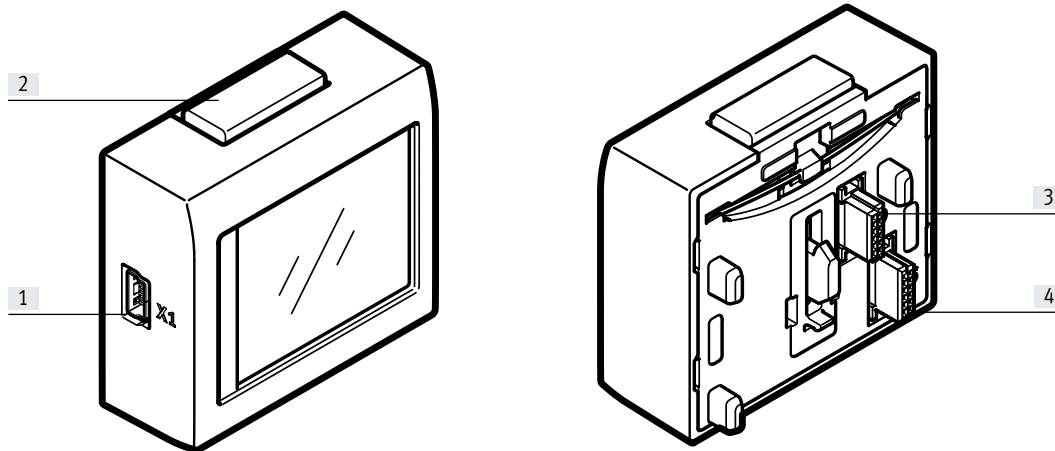
1) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/CDSB-A1 → Support/Downloads.

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)

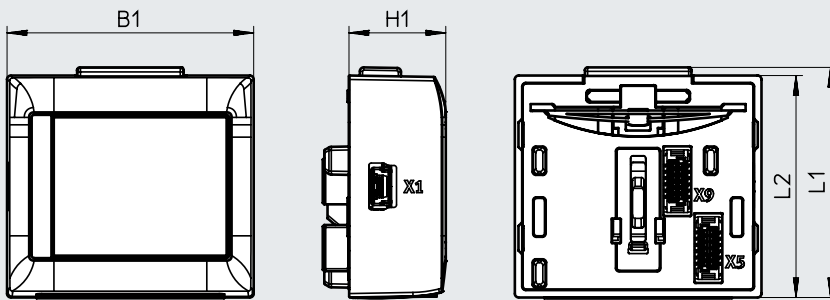
Interfaces		
Interface	Function	Description
X1	USB interface	The operator unit can be connected to a PC via the USB 2.0 type B mini interface. The operator unit is detected by the PC as a mass storage device.
X5	Interface to the basic unit	Interface for connection to the servo drive CMMT-AS
X9	Interface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

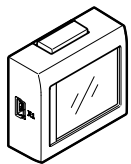
Dimensions

Download CAD data → www.festo.com



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

Ordering data



Display and control unit for:

- Servo drive CMMT-AS
- Controller CPX-E-CEC

Part no.	Type
8070984	CDSB-A1