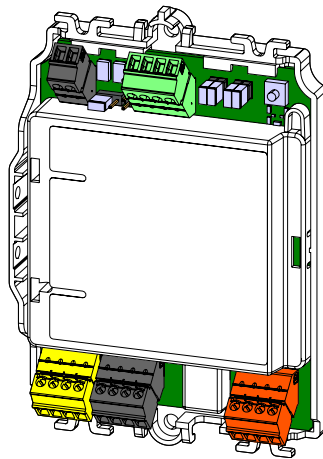


Sinteso™/ Cerberus™ PRO

## Input/Output Module (Transponder)

FDCIO223 ES ≥ 50



### An input/output module (transponder) addressed for the FDnet and C-NET detector lines

- Two monitored inputs/outputs, which can optionally be used as follows:
  - Collective detector line/conventional detector line
  - Contact input
  - Control output
  - Control output with confirmation
- LED indicator for input/output statuses, fault, test, etc.
- DC 24 V control output for equipment, max. 2x 1 A or 1x 1.5 A
- Internal fuses for the outputs that can be bridged, 2x 0.7 AT
- Two-wire installation for all cable types
- Pluggable connection terminals
- DC 24 V external power supply (detector lines electrically isolated)
- Microprocessor-controlled signal processing
- Communication via FDnet/C-NET (addressed individually)

### Eco-friendly

- Environmentally friendly processing
- Recyclable materials
- Electronic parts and synthetic materials can be easily separated

### Features

- Transparent housing, ensuring that LED indicators are easy to see
- Protected electronics
- Integrated line separator
- Easy mounting using snap fastener on U-rails TS35 in fire control panels
- Can be used in dry areas
- Housing FDCH221 can be used in dusty and humid environments.



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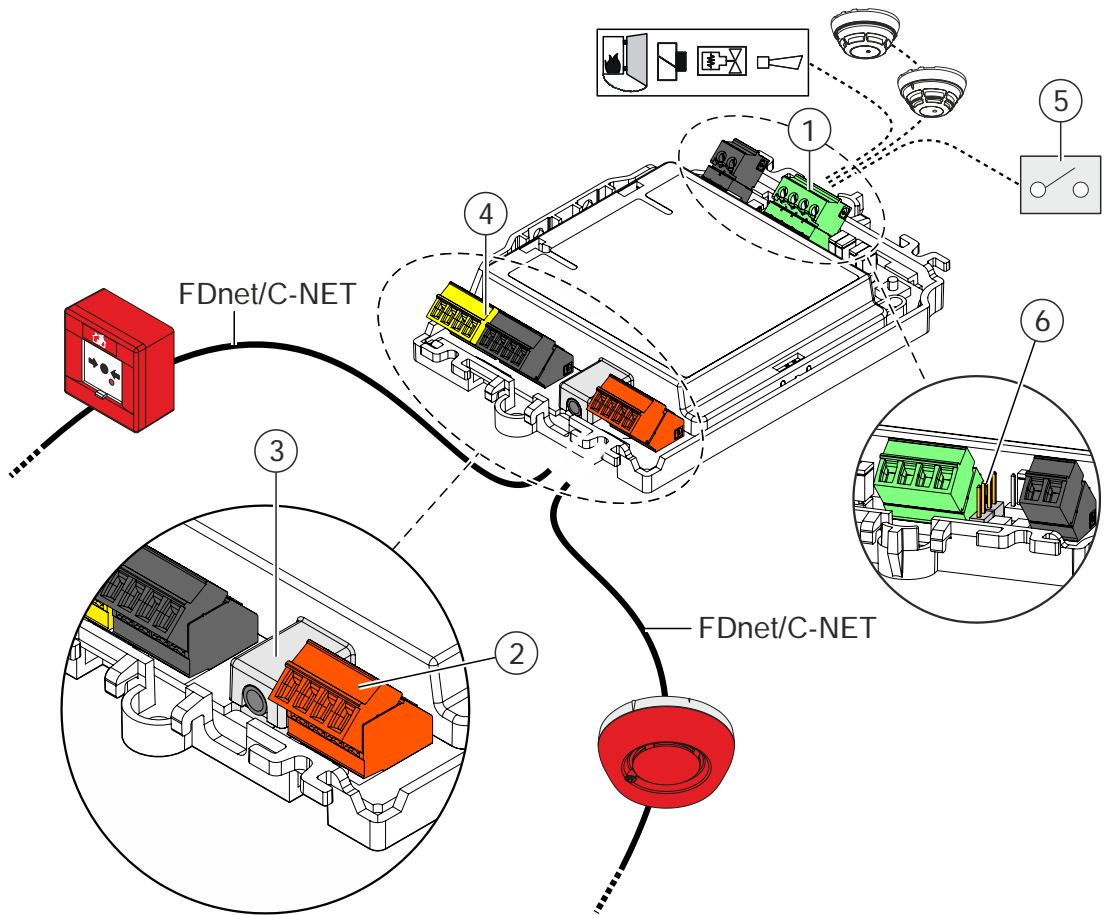
You can request the data sheet, mounting instructions, and technical manual for FDCIO223 with a product version ES < 50 via the Customer Support Center (CSC). Contact the CSC by phone on +49 89 9221-8000.

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The input/output module (transponder) FDCIO223 has the following application areas:

- Connection of collective fire detectors. If safety barrier SB3 is used, intrinsically safe collective fire detectors can be connected in potentially explosive atmospheres
- Connection of conventional fire detectors
- Monitored control of equipment such as smoke dampers, alarm devices, and door magnets

The input/output module (transponder) has a monitored signal input for status or alarm messages, or for confirming technical statuses.



- |   |  |   |                                       |
|---|--|---|---------------------------------------|
| 1 | Connections for input/output, collective/conventional detector line (2x) | 4 | External supply DC 24 V               |
| 2 | Connection for the FDnet/C-NET detector line                             | 5 | Contact input                         |
| 3 | Connection for the detector exchanger and tester (MC link)               | 6 | Jumper for internal fuses max. 0.7 AT |

	<p><b>NOTICE</b></p>
	<p><b>Country-specific safety regulations</b></p> <p>Failure to observe country-specific safety regulations can cause injury to persons and damage to property.</p> <ul style="list-style-type: none"> <li>• Observe country-specific regulations and comply with the corresponding safety directives.</li> </ul>

## Functions

The two inputs/outputs can be configured independently of one another as follows:

- Collective detector line and conventional detector line
- Contact input
- Control output
- Control output and input as confirmation with selectable monitoring window

The inputs/outputs are monitored as follows:

- Detector line set to quiet, alarm, open line, short-circuit, fault, and ground fault
- Contact input set to quiet, activated, open line, short-circuit, fault (terminating resistor), and ground fault
- Control output set to quiet, open line, short-circuit, and ground fault

The status is indicated by means of LED.

Control output with selectable equipment monitoring, either identical polarity or reverse polarity (e.g., alarm devices)

## Type Overview

Type	Designation	Order no.	Weight [kg]
FDCIO223 (ES ≥50)	Input/output module (transponder) incl. 2 20 V Transzorb diodes, 4 sets of terminating resistors, 2 mounting feet, 2 jumpers	S24218-B102-A1	0.126

### Accessories for the input/output module (transponder) FDCIO223

Type	Designation	Order no.	Weight [kg]
FDCH221	Housing with cover, seal, and screws	S54312-F3-A1	0.282
–	M20 x 1.5 metal cable gland	A5Q00004478	0.036
–	M20 metal counter nut	A5Q00004479	0.006
DBZ1190-AB	1.0...2.5 mm <sup>2</sup> (3-pin) connection terminal	BPZ:4942340001	0.001
TS35 (L = 122 mm)	U-rail TS35/7.5/122	BPZ:5644780001	0.041
TS35 (L = 288 mm)	U-rail TS35/7.5/288	BPZ:5644230001	0.098

### Replacement material for the input/output module (transponder) FDCIO223

Type	Designation	Order no.	Weight [kg]
FDCM291	Mounting foot	A5Q00003855	0.001

Document ID	Name
008164	Equipment overview Sinteso™ Detector system FD20
A6V10225323	Equipment overview Cerberus™ PRO Detector system FD720
008331	List of compatibility (for 'Sinteso™' product line)
A6V10229261	List of compatibility (for 'Cerberus™ PRO' product line)
009122	Technical manual Input/output module (transponder) FDCIO223
009124	Installation Input/output module (Transponder) FDCIO223, Housing FDCH221
001204	Principles, applications, installation, maintenance Fire alarm signal in areas at risk of explosion



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You can request the data sheet, mounting instructions, and technical manual for FDCIO223 with a product version ES < 50 via the Customer Support Center (CSC). Contact the CSC by phone on +49 89 9221-8000. You will find information on how to ascertain the product version of your device in chapter 'Product version ES' of the technical manual.

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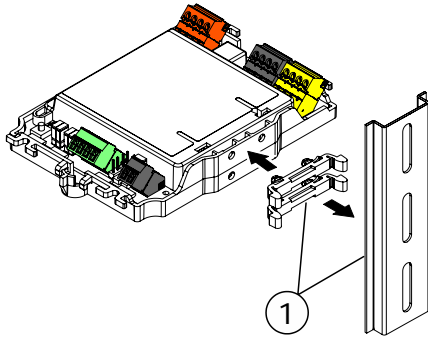
Related documents such as environmental declarations, CE declarations, etc., can be downloaded at the following Internet address:

<http://siemens.com/bt/download>

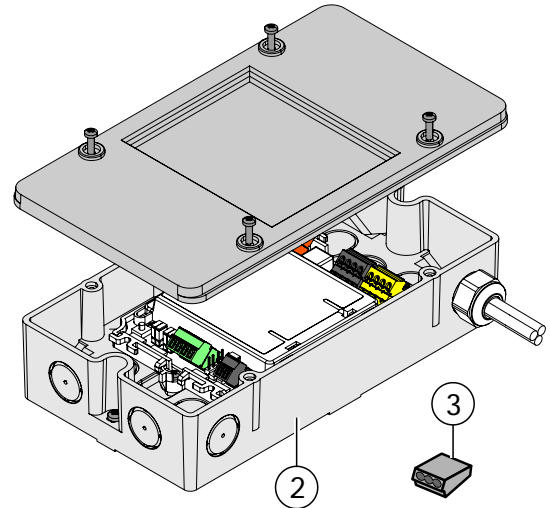
## Mounting

### Mounting options

- Mounting (series mounting) in a fire control panel on a U-rail TS35
- In housing FDCH221 (accessory) with cover, seal, and screws



- 1 Series mounting using mounting feet supplied, on U-rail TS35



- 2 Mounting in separate housing FDCH221 (accessory)
- 3 Use auxiliary terminals DBZ1190-AB (accessory) for shielded cables

## Disposal




The device is considered an electronics device for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

## Technical data

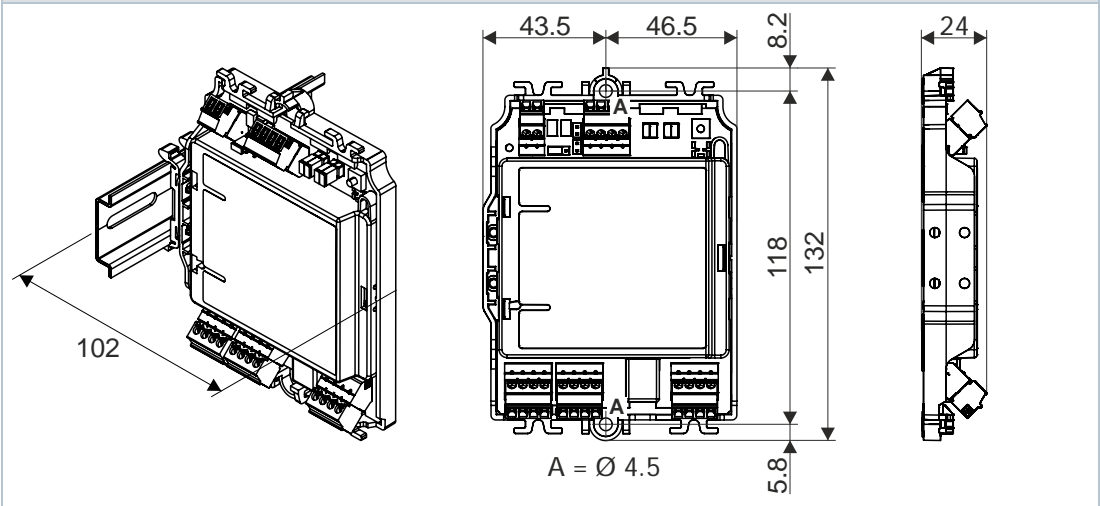
General (irrespective of the device)	
FDnet/C-NET operating voltage	DC 12...33 V
Operating current FDnet/C-NET	Max. 0.75 mA
Maximum current connection factor	3
External power supply:	
<ul style="list-style-type: none"> <li>• Input voltage</li> <li>• Operating current without secondary load at 24 V</li> <li>• Operating current with secondary load</li> </ul>	DC 18...32 V <ul style="list-style-type: none"> <li>• 26 mA (typ.)</li> <li>• 60 mA (max.)</li> </ul> Max. 2 A
Inputs/outputs as:	
<ul style="list-style-type: none"> <li>• Collective detector line/conventional detector line               <ul style="list-style-type: none"> <li>– Collective detector key figures KMK</li> <li>– Terminal resistance</li> </ul> </li> <li>• Control output</li> <li>• Contact input               <ul style="list-style-type: none"> <li>– Terminating resistor combinations</li> </ul> </li> </ul>	110 series, MS9, Sigmacon, AlgoRex, Synova600, Synova300, Apollo Series 65 / Orbis or similar 32 20 V Transzorb diode or EOL22 (Ex) DC 24 V ±5 % / max. 1x 1.5 A or 2x 1 A (fuse on 24 V supply line and on output side)
Operating temperature	-25...+60 °C
Storage temperature	-30...+65 °C
Air humidity	≤85 % rel. (no freezing or condensing at low temperature)
Communication protocol	FDnet/C-NET
Connections:	
<ul style="list-style-type: none"> <li>• Pluggable connection terminals</li> <li>• MC link</li> </ul>	0.2...1.5 mm <sup>2</sup> (with 2.5 mm <sup>2</sup> connection terminal DBZ1190-AB)  Plug-type connection, 3.5 mm jack socket
Color:	
<ul style="list-style-type: none"> <li>• Housing</li> <li>• Cover</li> <li>• Housing FDCH221</li> </ul>	~RAL 9010, pure white Transparent matt ~RAL 9010, pure white
Protection category (IEC 60529):	
<ul style="list-style-type: none"> <li>• When mounted on a U-rail in a fire control panel</li> <li>• With housing FDCH221</li> </ul>	IP30 IP65

General (irrespective of the device)	
Standards	CEA GEI I-084, EN 54-13, EN 54-17, EN 54-18
Approvals:	
• VdS	G206054
• LPCB	531m/03
• FM	3029351
• Marine	59 825 - 13 HH
System compatibility:	
• FDnet	FS20, AlgoRex, SIGMASYS
• C-NET	FS720

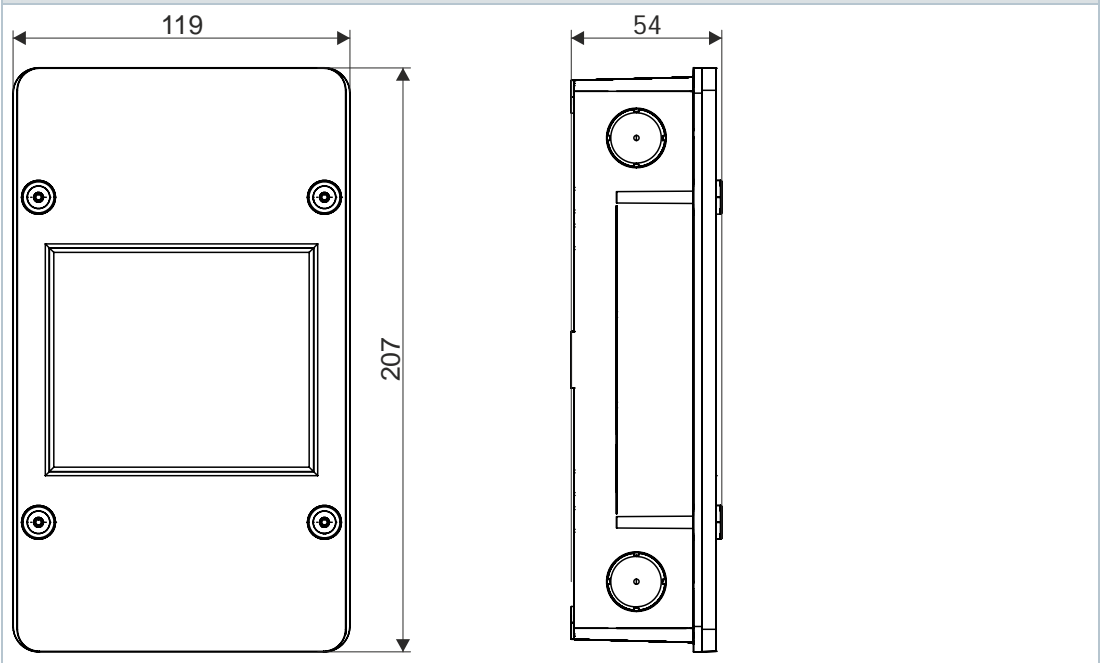
07  0786	<b>FDCIO223</b>	Siemens Switzerland Ltd; Gubelstrasse 22 CH-6301 Zug Technical data: see doc. <b>009122</b>
FDCIO223 - Input/output device incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.		
305/2011/EU (CPR): EN 54-18 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581		
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>		
DoP No.: 0786-CPR-20430; DoC No.: CED-FDCIO223		



Input/output module (transponder) FDCIO223



Housing FDCH221



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