



FDCL221-Ex

Sinteso™
Cerberus™ PRO

Line adapter (Ex)



Addressed (FDnet-Ex/C-NET-Ex)

For operating FDnet-Ex/C-NET-Ex peripheral devices in potentially explosive areas

- Electrical isolation of Ex and non-Ex lines in FDnet/C-NET
- Operation on stub or loop
- Status indicator/operating indicator with two LEDs
- MC link connection
- Installation in fire control panels or in an installation housing FDCH222

Properties

- **Eco-friendly**

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

- **Features**

- Protected electronics
- Integrated operating indicator
- Integrated LED for signaling the isolation of the Ex area

FDCL221-Ex line adapter (Ex)

- **Function**

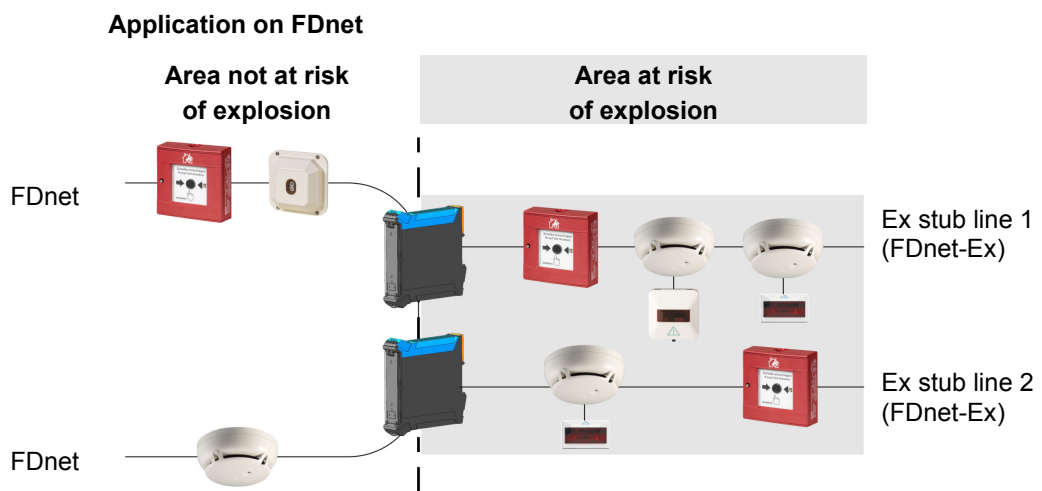
- The line adapter electrically isolates Ex and non-Ex areas
- It is not necessary for the housing to be connected to local ground
- The line adapter limits current and voltage in the Ex area and can also separate the Ex stub
- The power required for the line adapter to supply itself is taken from the FDnet/C-NET It is not necessary to connect an external power supply
- Operation possible on an FDnet/C-NET line or a stub There is therefore no separator function available on the non-Ex side
- The line adapter has two connections for the detector line (FDnet/C-NET) in the non-Ex area and a connection in the Ex area (FDnet-Ex/C-NET-Ex)
- Two LEDs for displaying the operating status and faults, and for localizing the device

- **Use**

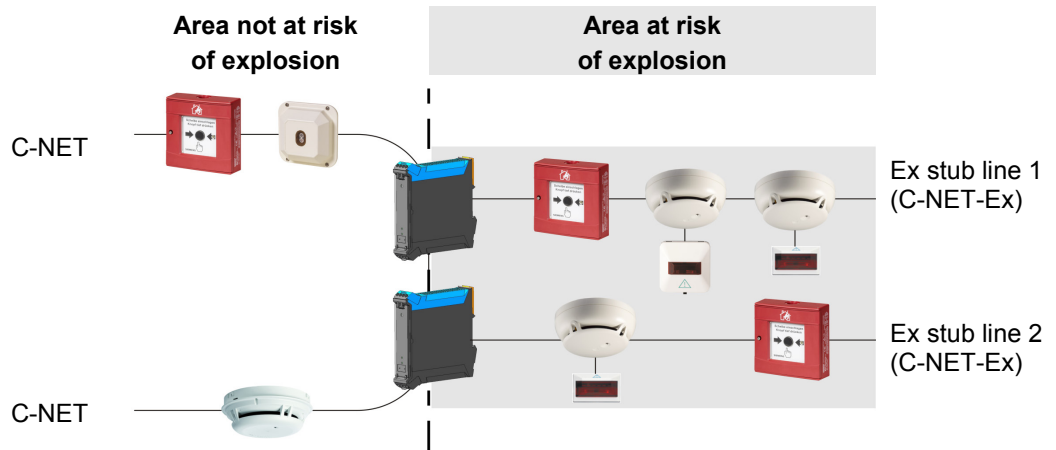
- The line adapter must not be installed in the Ex area
- The line adapter is used where the operation of Ex peripheral devices is required and isolates the Ex and non-Ex areas
- The line adapter only makes it possible to operate FDnet-Ex and C-NET-Ex devices. There are other safety barriers (SB2, SB3) available for collective systems.
- Changing from existing collective systems to addressable Sinteso and Cerberus PRO fire detection systems

- **Observe national regulations**

- **Ex installations must be carried out by qualified technical personnel**
Observe acceptance and documentation specifications

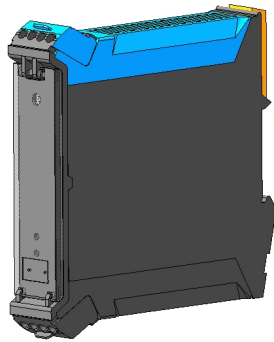


Application on C-NET



Installation


- The line adapter can be accommodated in an intermediate distributor in the riser zone on different floors, or at the former location of the collective control panel. Ideally, it is installed as close to the Ex area as possible because the cable lengths permitted in the Ex area, which are calculated individually in each case, are limited.
 - Installation materials, protective spacing, and necessary markings in potentially explosive areas must correspond to the national directives.
 - Observe specifications for insulation between Ex and non-Ex lines.
- **Installation in fire control panels or in an installation housing**
 - The separator can be installed on U-rails TS35 in the fire control panels FC20xx or FC72x or in an installation housing FDCH222.



W = 22.5 mm, H = 117.6 mm, D = 113.8 mm

Technical data

Dimensions (W x H x D)	22,5 x 117,6 x 113,8 mm															
Operating temperature	-25...+60 °C															
Storage temperature	-30...+75 °C															
Air humidity	≤95 % rel.															
Communication protocol	FDnet/C-NET//FDnet-Ex/C-NET-Ex															
Color	Black/blue															
Protection category according to EN 60529	IP20															
System compatibility																
– FDnet	FS20, AlgoRex, SIGMASYS															
– C-NET	FS720															
Operating voltage																
– Nominal voltage (U _n)	DC 12...33 V															
– Maximum voltage (U _m)	AC 253 V															
Operating current (quiescent)/(max. load)	1.5 µA / 25 mA															
Characteristics	<table> <tr> <td>U_o</td> <td>≤</td> <td>28 V</td> </tr> <tr> <td>I_o</td> <td>≤</td> <td>92 mA</td> </tr> <tr> <td>P_o</td> <td>≤</td> <td>644 mW</td> </tr> <tr> <td>L_o</td> <td><</td> <td>2.9 mH</td> </tr> <tr> <td>C_o</td> <td><</td> <td>82 nF</td> </tr> </table> <p>Linear output characteristics</p>	U _o	≤	28 V	I _o	≤	92 mA	P _o	≤	644 mW	L _o	<	2.9 mH	C _o	<	82 nF
U _o	≤	28 V														
I _o	≤	92 mA														
P _o	≤	644 mW														
L _o	<	2.9 mH														
C _o	<	82 nF														
Ex classification																
IECEX	<p>[Ex ia Da] IIC, Ta = -25...+60 °C</p> <p>[Ex ia Ga] IIIC, Ta = -25...+60 °C</p>															
Directive 94/9/EC: (ATEX Directive)	<p>II (1) G [Ex ia Ga] IIC, Ta = -25...+60 °C</p> <p>II (1) D [Ex ia Da] IIIC, Ta = -25...+60 °C</p>															
Standard for potentially explosive area	EN 60079-0:2012; EN 60079-11:2012; EN 60079-26:2007; EN 54-18															
Ex approvals																
– EC-type examination certificate	BVS 12 ATEX E 094															
– IECEX	BVS 12.0079															
EN 54 approvals																
– VdS	G213108															

14		0786	FDCL221-Ex	Siemens Switzerland Ltd; Gubelstrasse 22
		0102		CH-6301 Zug Technical data: see doc. A6V10333771
FDCL221-Ex - Input/output device for use in fire detection and fire alarm systems installed in buildings				
305/2011/EU (CPR): EN 54-18 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581 ; 94/9/EC (ATEX): EN 60079-0 / EN 60079-11 / EN 60079-26				
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or http://siemens.com/bt/download				
DoP No.: 0786-CPR-21322; DoC No.: CED-FDCL221-Ex				

Details for ordering

Type	Art. no.	Designation	Weight
FDCL221-Ex	S54329-F4-A1	Line adapter (Ex)	0.240 kg
FDCH222	S54329-F10-A1	Installation housing	0.500 kg
–	BPZ:5644780001	U-rail TS35, 122 mm long	0.040 kg
–	BPZ:5644230001	U-rail TS35, 288 mm long	0.090 kg

You will find additional information in the following documents:

- Equipment overview, doc no. 008164 (Sinteso), A6V10225323 (Cerberus PRO)
- For system compatibility, see the lists of compatibility, doc no. 008331 (Sinteso) and A6V10229261 (Cerberus PRO)
- Line adapter FDCL221-Ex technical manual, doc no. A6V10333771
- Planning, mounting/installation, commissioning, maintenance/servicing of fire detection installations FS20 and FS720 in potentially explosive areas, doc no. A6V10324618

Siemens Schweiz AG
Infrastructure & Cities Sector
Building Technologies Division
International Headquarters
CPS Fire Safety
Gubelstrasse 22
CH-6301 Zug
Tel. +41 41 724 24 24
www.siemens.com/buildingtechnologies

© 2014 Copyright by
Siemens Switzerland Ltd

Technical specifications and availability subject to change without notice.

Document no. **A6V10349349_c_en_--**
Edition 06.2014

FD20/FD720 manual
Register 8/8