



DT1101A-Ex, DT1102A-Ex, DO1101A-Ex

Automatic fire detectors

collective/SynoLINE600

for explosion-hazard area of zones 1 and 2

AlgoRex
Synova™
Sinteso™
Cerberus™ PRO



- **High degree of reliability and stability**
- **High resistance to**
 - electromagnetic interference
 - humidity and corrosion
- **Connection to the detection line via the DC1192 input/output module**
 - for galvanic isolation and connection to the collective/SynoLINE600, interactive or AnalogPLUS/SynoLOOP fire detection system
- **Connection to the detection line via the FDCIO223 transponder**
 - for galvanic isolation and connection to the addressable FDnet/C-NET fire detection system
- **Comprehensive final examination and quality control**
- **Environmentally safe material**
 - halogen-free plastic material identifiable through embossed code
 - easy to uninstall and disassemble

Smoke detector DO1101A-Ex, collective wide spectrum Ex



- Uniform response behavior for different types of fire
- New, high performance optoelectronic sensor system
- High resistance to soiling and temperature fluctuation

- **Function**

- Penetrating smoke scatters the light of an infrared beam in the detector. If the light scatter exceeds a certain value, the detector transmits a danger signal to the control unit.
- Built-in alarm indicator provides on-site signaling of alarm.

- **Application**

- For the early warning of smoke-forming flaming fires and smoldering fires in explosion-hazard areas of zones 1 and 2.

Heat detectors DT1101A/02A-Ex



- Response behavior immune to deceptive phenomena with rapid and slow increases in temperature
- Intelligently designed differential characteristics
- Maximum temperature alarm activation with quality thermo sensor
- Reliable heat detector for demanding requirements:
 - DT1101A-Ex: Heat detector with wide application range (up to +50 °C)
 - DT1102A-Ex: Heat detector for high ambient temperatures (up to +70 °C)

- **Function**

- The detector measures the ambient temperature with one NTC thermistor and the detector housing temperature with another NTC thermistor. In this way the detector can rapidly and differentially evaluate an increase in temperature independent of the starting temperature.
- Built-in alarm indicator provides on-site signaling of alarm.

- **Application**

- For the monitoring of explosion-hazard areas of zones 1 and 2 where in the event of fire, a rapid increase in temperature can be expected, or other types of detector cannot be used due to operational reasons.

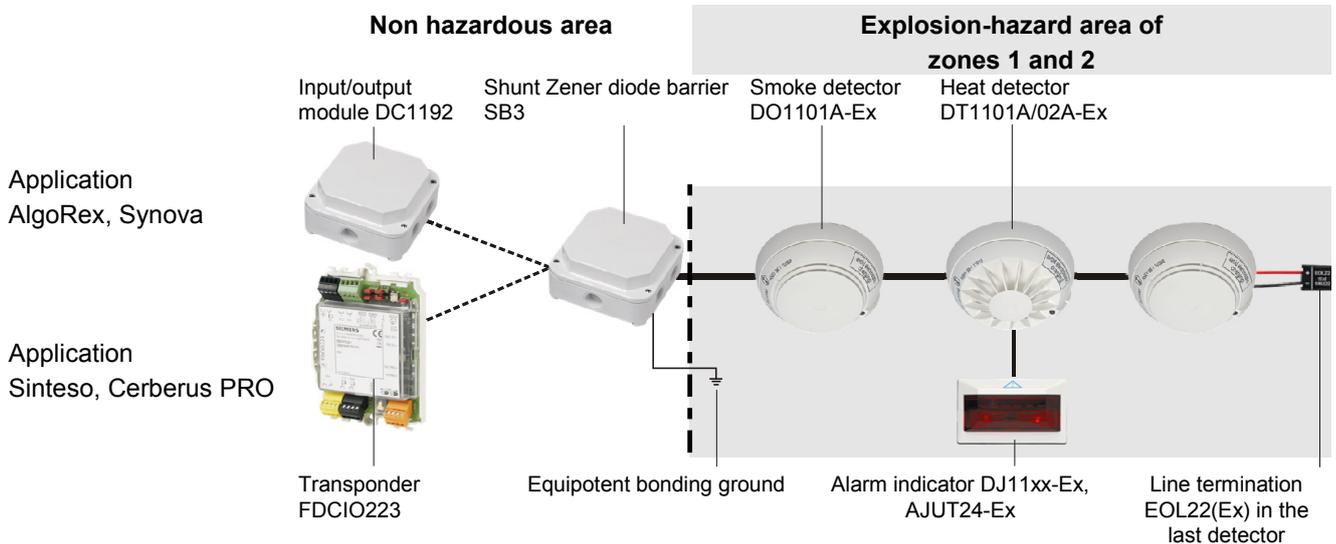
Design

- Mounting with detector base DB1101A
- Range of base accessories for installation even in critical locations
- Connection to the control unit via a two-wire line
- Vibration-proof mounting of detector in the base
- Anti-theft device if required
- One external alarm indicator can be connected
- DO1101A-Ex and DT1101A/02A-Ex fire detectors are designed to the explosion protection category 'Intrinsic safety' Ex i. The standards which cover this are EN 50014 (IEC 60079-0) and EN 50020 (IEC 60079-11).

Installation in explosion-hazard areas

Equipment installed in explosion-hazard areas must always comply with local national regulations.

The DC1192/FDCIO223 input/output module and the series-connected SB3 shunt Zener diode barrier are used as a galvanic isolation between explosion-hazard and non hazardous areas.



Further details can be found in the documents

- Fire protection in explosion-hazard areas, document no. 1204
- Input/output module DC1192, document no. 001571
- Transponder FDCIO223, document no. 009168
- Shunt Zener diode barrier SB3, document no. 001222

Maintenance

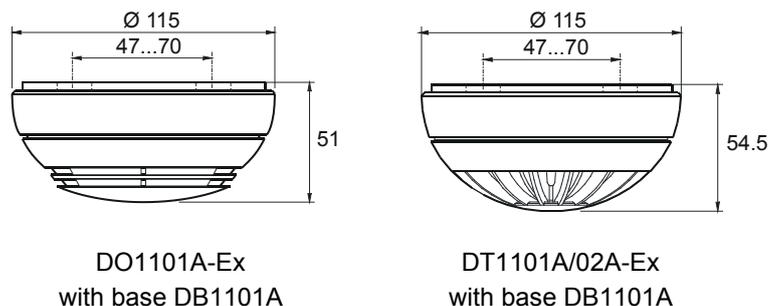
DO1101A-Ex, DT1101A/02A-Ex

- Detectors can be inserted and removed from their bases with a detector exchanger up to a height of 7 m.

DO1101A-Ex

- By means of a periodic factory overhaul (cleaning and re-calibration), smoke detectors are given a new lease of life.

Dimensions



Technical data

	DO1101A-Ex	DT1101A-Ex	DT1102A-Ex
Operating voltage	DC 17...24 V	DC 16...24 V	DC 16...24 V
Operating current (quiescent)	max. 100 µA	max. 100 µA	max. 100 µA
Operating temperature	-25...+60 °C	-25...+50 °C	-25...+70 °C
Storage temperature	-30...+75 °C	-30...+75 °C	-30...+75 °C
Humidity	≤95 % rel.	≤95 % rel.	≤95 % rel.
Protection category IEC60529	IP44	IP44	IP44
Color	white, ~RAL 9010	white, ~RAL 9010	white, ~RAL 9010
Standards			
– for fire detectors	EN 54-7	EN 54-5: A1R	EN 54-5: B
– for explosion-hazard areas	EN 50014 (IEC 60079-0) EN 50020 (IEC 60079-11)	EN 50014 (IEC 60079-0) EN 50020 (IEC 60079-11)	EN 50014 (IEC 60079-0) EN 50020 (IEC 60079-11)
Ex classification	II 2 G Ex ib IIC T4 (-25 °C ≤Ta ≤60 °C)	II 2 G Ex ia IIC T4 (-25 °C ≤Ta ≤50 °C)	II 2 G Ex ia IIC T4 (-25 °C ≤Ta ≤70 °C)
Ex approvals	PTB 02 ATEX 2135 VdS no. G296052 LPCB no. 1161a/02	PTB 02 ATEX 2097 VdS no. G296019 LPCB no. 1161c/02	PTB 02 ATEX 2097 VdS no. G296019 LPCB no. 1161c/04
Connection factor KMK	1.6	1	1
Compatibility	<ul style="list-style-type: none"> – By using the DC1192 input/output module and SB3 shunt Zener diode barrier it is compatible with fire detection system control units with collective/SynoLINE600, interactive or AnalogPLUS/SynoLOOP signal evaluation. – By using the FDCIO223 transponder and SB3 shunt Zener diode barrier it is compatible with fire detection system control units with FDnet/C-NET signal evaluation. 		
QS Standards	Fire protection industry certified quality assurance system according to EN ISO 9001:2000.		

05  0786	DO1101A-Ex	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. 001485
DO1101A-Ex - Point type smoke detector for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-7 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 94/9/EEC (ATEX): EN 60079-0 / EM 60079-11 ;		
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-20076; DoC No.: CED-DO1101A-Ex		

05  0786	DT1101A-Ex	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. 001485
DT1101A-Ex - Point type heat detector for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-5 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 94/9/EEC (ATEX): EN 60079-0 / EM 60079-11 ;		
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-20080; DoC No.: CED-DT1101A-Ex		

05  0786	DT1102A-Ex	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. 001485
DT1102A-Ex - Point type heat detector for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-5 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 94/9/EEC (ATEX): EN 60079-0 / EM 60079-11 ;		
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-20095; DoC No.: CED-DT1102A-Ex		

Details for ordering

Type	Part no	Designation	Weight
DO1101A-Ex	BPZ:5008010001	Smoke detector	0.130 kg
DT1101A-Ex	BPZ:4852140001	Heat detector	0.105 kg
DT1102A-Ex	BPZ:4852270001	Heat detector	0.105 kg

Base and accessories see document 001035

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