



DO115xA / DT1152A / DOT115xA

AlgoRex

## Automatic fire detectors



Interactive

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- **Detection algorithms for specific applications stored in the detector processor**
- **Built-in diagnosis algorithms with automatic self-test**
- **Unrivalled immunity to deceptive alarms and ambient influences**
- **High resistance to**
  - electromagnetic interference
  - humidity and corrosion
- **Modern design**
- **Blends well with every room decor**
- **Environmentally safe material**
  - halogen-free plastic material identifiable through embossed code
  - easy to uninstall and disassemble
- **Comprehensive final examination and quality control**

## Smoke detectors DO1151A / DO1152A / DO1153A, interactive wide spectrum

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- Reacts equally well to a wide range of fires
- Dynamic analysis of the sensor signal 'Smoke' in the detector itself
- Choice of response behavior – Parameterization from the control unit
- Outstanding operating reliability through data processing in the detector and distributed system intelligence
- High performance optoelectronic sensor system
- High resistance to soiling

### • Function

- Four stages of danger enable the activation of different measures as well as early warning in the event of incorrect application.
- Periodically or upon command the detector carries out a thorough self-test.
- Special computing procedures in the detector processor (Algorithms) enable evaluation according to application criteria by optimizing smoke sensitivity, immunity to interference and operational reliability. In addition the false alarm rate at constant detector sensitivity is considerably reduced.
- Compensation of measured values enables the detector to maintain a practically uniform level of sensitivity throughout its entire operating life.
- Built-in alarm indicator provides on-site signaling of alarm.
- DO1152A / DO1153A: A built-in line separation switch isolates the defective part if the detector bus suffers short circuit.

### • Application

- DO1151A / DO1152A: For the early warning of smoke-forming flaming fires and smoldering fires.
- DO1153A: With increased sensitivity for use in air sampling smoke detection systems.

## Heat detector DT1152A

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- Reliable heat detector for demanding requirements
- Selectable, standardized response categories – Parameterization from the control unit
- Response behavior immune to deceptive phenomena with rapid and slow increases in temperature
- Intelligently designed differential characteristics
- Precise maximum temperature alarm activation with quality thermo sensor
- Fully-monitored sensors

### • Function

- Four stages of danger enable the activation of different measures as well as early warning in the event of incorrect application.
- Periodically or upon command the detector carries out a thorough self-test.
- The ThermoRex 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.
- Four different standard response categories (Parameter) can be set via the control unit.
- Built-in alarm indicator provides on-site signaling of alarm.
- A built-in line separation switch isolates the defective part if the detector bus suffers short circuit.

### • Application

- For the monitoring of rooms and installations 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.

## Smoke detectors DOT1151A / DOT1152A, interactive-neural

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- Total response to all types of fire thanks to multi-criteria sensors
- Dynamic analysis of the sensor signals 'Smoke' and 'Heat'
- Fuzzy logic and neural network in the detector
- Choice of response behavior – Parameterization from the control unit
- Outstanding operating reliability through data processing in the detector and distributed system intelligence
- High-quality Opto and thermo electrical sensor systems
- High resistance to soiling and temperature fluctuation

### ● Function

- Four stages of danger enable the activation of different measures as well as early warning in the event of incorrect application.
- Periodically or upon command the detector carries out a thorough self-test.
- Special computing procedures in the detector processor (Algorithms) enable evaluation according to application criteria by optimizing smoke sensitivity, immunity to interference and operational reliability. In addition the false alarm rate at constant detector sensitivity is considerably reduced.
- Compensation of measured values enables the detector to maintain a practically uniform level of sensitivity throughout its entire operating life.
- Multi-criteria evaluation on the basis of a neuronal network and fuzzy logic provides information on the nature of the fire and eliminates deceptive phenomena.
- Built-in alarm indicator provides on-site signaling of alarm.
- DOT1152A: A built-in line separation switch isolates the defective part if the detector bus suffers short circuit.

### ● Application

- For the early warning of flaming fires involving solid particles and liquids as well as smoldering fires.

## Design

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- Mounting with detector base DB1151A
- 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
- Two external alarm indicators can be connected

## Maintenance

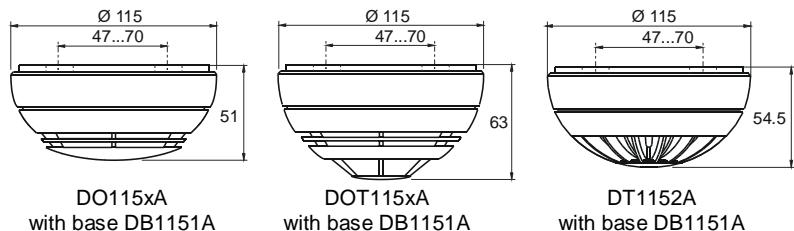
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- Detectors can be exchanged without modifying parameters
- Detectors can be inserted and removed from their bases with a detector exchanger up to a height of 7 m.

## DO115xA / DOT115xA

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

## Dimensions



## Technical data

	DO1151A / DO1152A	DO1153A	DOT1151A / DOT1152A	DT1152A
Operating temperature	-25...+70 °C	-25...+70 °C	-25...+70 °C	EN54-5: -25...+50 °C EN54-8: -25...+70 °C
Storage temperature	-30...+75 °C	-30...+75 °C	-30...+75 °C	-30...+75 °C
Humidity (no condensation)	≤95 % rel.	≤95 % rel.	≤95 % rel.	≤95 % rel.
Protection category EN60529 / IEC529	IP44	IP44	IP44	IP44
Color	white, ~RAL 9010	white, ~RAL 9010	white, ~RAL 9010	white, ~RAL 9010
Standards	DO1151A ->EN 54-7 DO1152A -> EN 54-7, EN 54-17	EN 54-17 only in combination with air sampling smoke detection systems	DOT1151A ->EN 54-7 DOT1152A -> EN 54-7, EN 54-17	EN 54-17, EN 54-5: A1R, BS
Approvals	-			
- VdS	G293040	–	G293041	G294019
- LPCB	1161a/03 / 1161b/02		1161a/04 / 1161b/04	1161d/02
Connection factor IMK	1	1	1	1
Compatibility	Compatible with interactive fire detection system S11			
QS standards	Fire protection industry certified quality assurance system according to: EN ISO 9001:2000			

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**DO1151A**

Siemens Switzerland Ltd; Gubelstrasse 22  
CH-6301 Zug  
Technical data: see doc. 001009

DO1151A - 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

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

DoP No.: 0786-CPR-20150; DoC No.: CED-DO1151A

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**DO1152A**

Siemens Switzerland Ltd; Gubelstrasse 22  
CH-6301 Zug  
Technical data: see doc. 001009

DO1152A - Point type smoke detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.

305/2011/EU (CPR): EN 54-7 / EN 54-17 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3

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

DoP No.: 0786-CPR-20151; DoC No.: CED-DO1152A

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**DO1153A**

Siemens Switzerland Ltd; Gubelstrasse 22  
CH-6301 Zug  
Technical data: see doc. 001009

DO1153A - Short-circuit isolator as part of a high sensitivity smoke detector for use in fire detection and fire alarm systems installed in buildings.

305/2011/EU (CPR): EN 54-17 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3

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

DoP No.: 0786-CPR-20625; DoC No.: CED-DO1153A

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**DT1152A**

Siemens Switzerland Ltd; Gubelstrasse 22  
CH-6301 Zug  
Technical data: see doc. 1040

DT1152A - Point type heat detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.

305/2011/EU (CPR): EN 54-5 / EN 54-17 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3

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

DoP No.: 0786-CPR-20158; DoC No.: CED-DT1152A

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**DOT1151A**

Siemens Switzerland Ltd; Gubelstrasse 22  
CH-6301 Zug  
Technical data: see doc. 001027

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 ;

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

DoP No.: 0786-CPR-20153; DoC No.: CED-DOT1151A

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**DOT1152A**

Siemens Switzerland Ltd; Gubelstrasse 22  
CH-6301 Zug  
Technical data: see doc. 001027

Point type smoke detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.

305/2011/EU (CPR): EN 54-7 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3

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

DoP No.: 0786-CPR-20154; DoC No.: CED-DOT1152A

## Details for ordering

Type	Part no	Designation	Weight
DO1151A	BPZ:4930150001	Smoke detector	0.170 kg
DO1152A	BPZ:4867050001	Smoke detector (with line separator)	0.170 kg
DO1153A	BPZ:5000500001	Smoke detector (for air sampling smoke detection systems)	0.150 kg
DOT1151A	BPZ:4866950001	Smoke detector	0.185 kg
DOT1152A	BPZ:4867180001	Smoke detector (with line separator)	0.185 kg
DT1152A	BPZ:4867210001	Heat detector	0.115 kg

For base and accessories see document 001035

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