



**FDOOT221, FDO221, FDT221**

Sinteso™  
C-LINE

**DA Neural fire detector**

**DA Wide spectrum smoke detector**

**DA Heat detector**

CE

Addressable

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- The optimum smoke detector for each application
  - Signal processing with detection algorithms
  - Early and reliable detection of emerging fires
  - High immunity to deceptive phenomena
  - Highest system availability thanks to redundant sensory analysis
  - Communication via FDnet
  - Ecologic material concept

## Characteristics

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- **Environmental**

- ecologically processing
- recyclable materials
- electronic und synthetic material simple separable
- ecologically beneficial detector testing without gas

- **Characteristics**

- resistant to environment and interference factors such as dust, fibers, insects, humidity, extreme temperatures, electro-magnetic interference, corrosive vapors, vibration, impact, synthetic aerosols and atypical fire phenomena
- signal processing with detection algorithms
- proven and tested immunity to power electronics disturbances
- protected electronics, high-quality components
- sophisticated sensor and electronics surveillance
- redundant, high-quality sensor system
- built-in response indicator (AI), visible at 360°
- integrated short-circuit isolator
- the same detector base type can be used for each detector type

### DA Neural fire detector FDOOT221

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- **Function**

- works according to the scattered light principle with two sensors, optical forward and backward scattering
- opto-electronic sampling chamber holds off disturbing extraneous light but optimally detects both dark and light smoke particles
- two additional hear sensors increase the fire detector's immunity to deceptive phenomena
- selectable detection behavior thanks to different parameter sets

- **Application**

- for the early detection of flaming fires caused by the combustion of liquid and solid matters, as well as smoldering fires
- for the early and reliable fire detection in environments with deceptive phenomena

### DA Wide spectrum smoke detector FDO221

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- **Function**

- works according to the scattered light principle with one sensor, optical forward scattering
- opto-electronic sampling chamber holds off disturbing extraneous light but optimally detects both dark and light smoke particles
- selectable detection behavior thanks to different parameter sets

- **Application**

- for the early detection of smoke-generating flaming and smoldering fires

### DA Heat detector FDT221

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- **Function**

- equipped with two redundant heat sensors, so that in case of failure of one sensor, the detector still complies with the highest response class
- measures the ambient temperature and the temperature in the detector housing, so that an temperature increase can be detected immediately
- selectable detection behavior thanks to different parameter sets

- **Application**

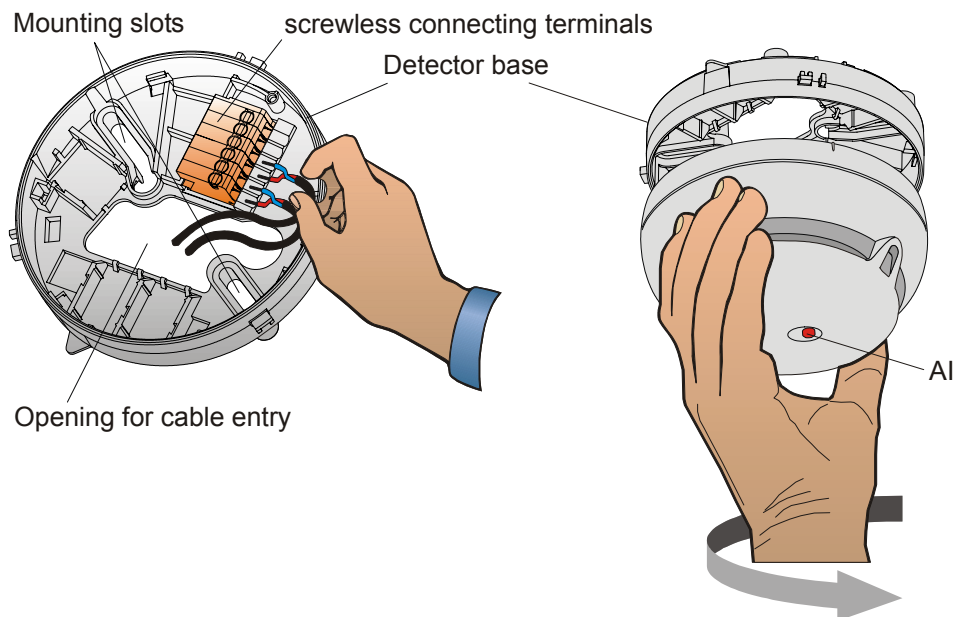
- monitoring of rooms in which a quick temperature rise is expected in case of fire, or when optical detection is difficult

## Installation

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- **Easy, time-saving and high-quality mounting**

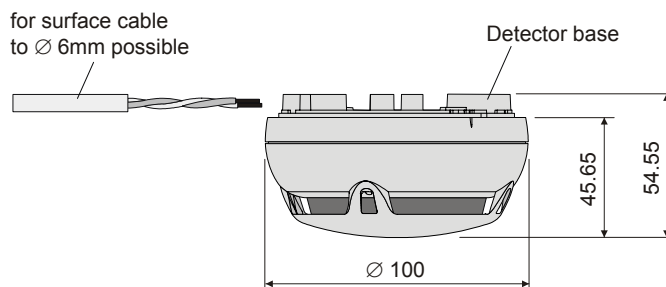
- universal base for surface and recess mounting
- extra-large mounting slots facilitate a re-use of existing drill holes resulting from other systems
- large opening in the detector base for easy cable insertion
- screw less terminals (spring clip principle)
- detector line can be connected without any tools; the wire can be simply plugged in manually
- detector can be easily turned into the base by hand, or with the detector exchange



- response indicator (AI) centered in the detector; no alignment required

## Dimensions

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## Efficiency on site

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- “one man” testing, commissioning, diagnostics and maintenance
- detector replacement without new parameter setting
- detector replacement without ladder up to 8 m height

## Technical data

	FDOOT221	FDO221	FDT221
Operating voltage (modulated)	12... 33 VDC	12... 33 VDC	12... 33 VDC
Operating current (quiescent)	200... 280 $\mu$ A	180... 230 $\mu$ A	130... 200 $\mu$ A
ext. response indicator without sounder base	2 1	2 1	2 –
ext. response indicator with sounder base			
AI connectable and programmable			
Operating temperature	–25... +70 °C	–10... +60 °C	–25... +50 °C / –25... +70 °C depending on the parameterization
Storage temperature	–30... +75 °C	–30... +75 °C	–30... +75 °C
Humidity at T $\leq$ 34 °C at T $\geq$ 34 °C	$\leq$ 95 % rel. short-term moisture condensation permitted $\leq$ 35 g/m <sup>3</sup>	$\leq$ 95 % rel. short-term moisture condensation permitted $\leq$ 35 g/m <sup>3</sup>	$\leq$ 95 % rel. short-term moisture condensation permitted $\leq$ 35 g/m <sup>3</sup>
Communication protocol	FDnet	FDnet	FDnet
Color	pure white (RAL9010)	pure white (RAL9010)	pure white (RAL9010)
Protection category EN60529 / IEC529			
– Base	IP43	IP43	IP43
– Base attachment	IP44	IP44	IP44
– Base attachment wet	–	–	IP55
Standards	CEA4021 / EN54-7	EN54-7	EN54-5
Approvals			
– VdS	G204006	G204018	G204020
System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet		
QS standards	Siemens Standard SN 36350		

## Details for ordering

Type	Part no	Designation	Weight
FDOOT221	A5Q00001566	Neural fire detector	0.102 kg
FDO221	A5Q00001565	Wide spectrum smoke detector	0.100 kg
FDT221	A5Q00001567	Heat detector	0.085 kg
FDB221	A5Q00001664	Detector base, addressable	0.028 kg
FDB201	A5Q00003814	Detector base, collective	0.028 kg

Detector base accessories see data sheet 007775