# **SIEMENS**



# FDT181 Heat Detector Product Manual

## Overview

The heat detector FDT181 is an intelligent detector. It is used for early fire detection inside a building and particularly suitable for use in places where other types of detectors are not suitable because they can be misled by the smoke, dust and gas generated during work there.

### **Characteristics**

- With built-in CPU, signals received are processed by intelligent algorithm
- Two operation modes: A2S/A2R
- Automatically address setting without encoder setting or DIP switch
- All-around visible alarm indicator
- Resistant to environment and interference factors such as humidity, electro-magnetic interference, corrosive and vibration.
- Communication via FD18-BUS, polarity free connection
- "Sticker Method" easy for commissioning

#### **Functions**

- The detection behavior of the detectors is influenced by the parameter sets, so that it can be specifically adjusted to the fire phenomena and environmental conditions to be expected in the environment to be monitored
- Unique ID of each detector, controller can identify the detector type according to the ID and assign address

# **Building Technologies**

- Suitable for use in places where the ambient temperature can change rapidly or smoke detector are not suitable
- Dust cap protects the detector from being contaminated by construction work

#### Indicator

The detector is provided with an internal alarm indicator to show its operating status. (See table)

Detector	Indicator
Normal	Off
Locate/Test	Flashing
Alarm	Steady on

#### Installation

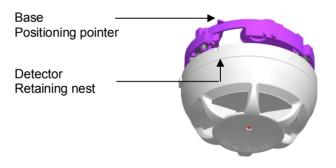
### • Easy and time-saving mounting

Install the base and finish the wiring during the construction phase.

- 1. Point the retaining nest to the positioning pointer and insert it into the base.
- 2. Turn it clock wisely until it stops.

#### **Uninstallation:**

- 1. Turn it counterclockwisely until it stops.
- 2. Pull the detector out.

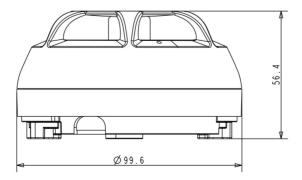


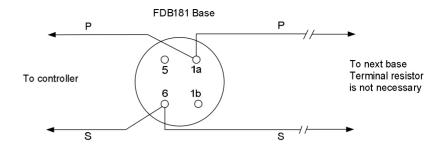


After all the construction is finished, the dust cap must be taken away!

### **Dimensions**

In: mm (with base)





## **Maintenance**

#### Performance test

Recommendation:

- Submit all detectors to an annual visual check. Detectors that are strongly soiled or mechanically damaged must be replaced.
- Any detectors should be replaced after 7 to 10 years of service, independent from the environmental conditions.
- Long term auxiliary detectors should be stored with plastic bag.
- Carry out heat test each year.

## **Teconical data**

Operating voltage	12 32 VDC		
Operating current (quiescent)	0.26 mA		
Activation current	1.2 mA		
Operating temperature	−10 +50 °C		
Storage temperature	−20 +75 °C		
Humidity	≤96% (40±2 °C)		
Communication protocol	FD18-BUS		
Color	White, RAL 9010		
Protection category GB4208-93	IP44		

# **Details for ordering**

Туре	Material No.	Part No.	Designation	Weight
FDT181	S54320-F3-A1	100856212	Heat detector	0.064Kg
FDB181	S54320-F1-A1	100856213	Detector base	0.027Kg
	A5Q00022001	100566011	FDT181 dust cap	

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