



FDT181C Collective Heat Detector Product Manual

Overview

The heat detector FDT181C is a collective detector. It is used for fire detection inside a building.

Characteristics

- Operation modes: A2 (Rate-of-rise and fixed temperature)
- Collective detector, no address setting, polarity free connection
- 360° visible alarm indicator
- Resistant to environment and interference factors such as humidity, corrosive and vibration, with immunity against electro-magnetic interference.

Application

- Communication with FC18 controller via FDC1183 transponder, each FDC1183 can connect max. 32 collective detectors.
- Communication with BC80 controller via BDS161 transponder, each BDS161 can connect max. 10 collective detectors.

Indicator

The detector is provided with an internal alarm indicator to show its operating status.

Status	Indicator
Normal	Off
Alarm	Steady on

Installation

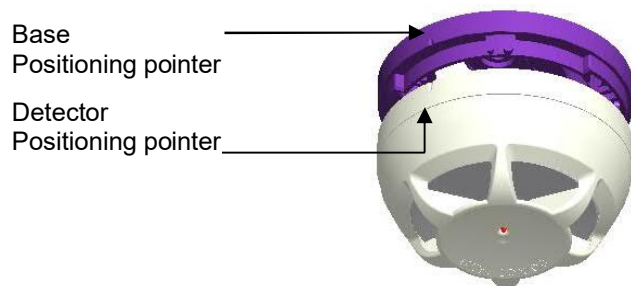
• Easy and time-saving mounting

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

1. Insert detector into base and turn it clockwise until positioning pointer on base align with positioning pointer on detector (see below).

Uninstallation:

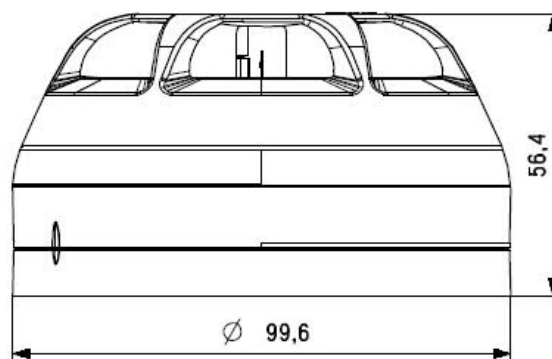
1. Turn it counterclockwise and pull the detector out of base.



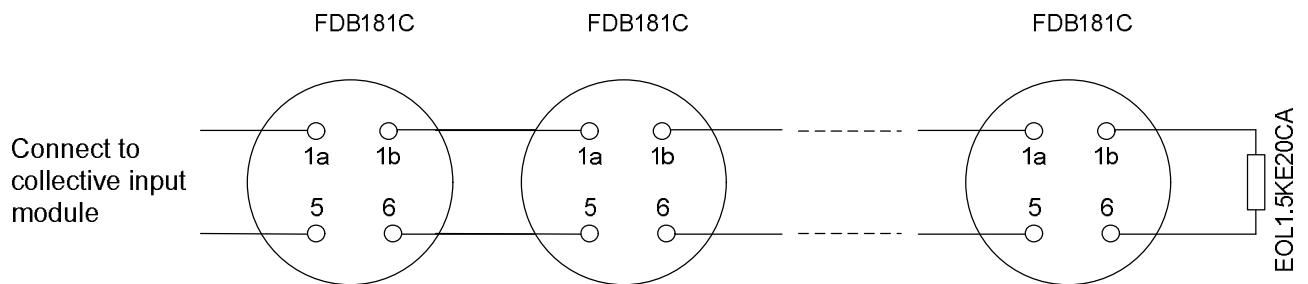
After all the construction is finished, the dust cap must be taken away!
No painting!

Dimensions

In: mm (with base)



Connection diagram



Maintenance

• Performance test

Recommendation:

- Submit all detectors to an annual visual check. Detectors that are strongly soiled or mechanically damaged must be replaced.
- Long term backup detectors should be stored with plastic bag.
- Carry out heat test each year.

Technical data

Operating voltage	10...28 VDC
Operating current (quiescent)	≤0.1 mA
Activation current	≤60.0 mA
Operating temperature	-10...+50 °C
Storage temperature	-20...+70 °C
Humidity	≤96% (40±2 °C)
Color	White, RAL 9010
Protection category GB4208-93	IP40

Specifications

No.	Name	Operating temperature typ. / max.	Static activation temperature ¹	Differential activation temperature ²
		[°C]	[°C]	ΔT [K]
1	A2S 60 °C maximum	25 / 50	60	-
2	A2R 60 °C rate of rise	25 / 50	60	25 ³

¹ Applicable with slow temperature increases <1 K/min.

² Applicable with fast temperature increases >10 K/min.

³ Between 1 K/min and 10 K/min, this value increases by a few degrees.

Details for ordering

Type	Material No.	Part No.	Designation	Weight
FDT181C	S54320-F12-A2	101190983	Collective heat detector	0.065 kg
FDB181C	S54320-F9-A2	101190980	Collective detector base	0.038 kg

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