TXC7111

Conventional Heat Detector
Installation and Operation Manual

1 Overview

TXC7111 Conventional Heat Detector (A1R) adopts advanced MCU technology. It is able to accurately detect the variation of the ambient temperature so as to confirm and send a fire alarm timely. It is designed with esthetical pleasing appearance and easy installation, and it is applicable to hotel, restaurant, computer room, bank, shopping mall, museum, library, office and warehouse etc.

2 Features

2.1 Aesthetically pleasing low profile design

2.2 Low power consumption, simple to use

2.3 Quicker responding speed to variation of ambient temperature

2.4 Enhanced capacity of interference resistance by multilevel wave filters

2.5 Fully-sealed PCB board protection process

3 Technical Parameters

3.1 Operating Voltage: DC24V±20%

3.2 Operating Current: Standby   ≤ 0.15mA   Alarm: ≤ 28mA

3.4 Indicator: Monitoring: Red, flashes periodically

   Action: Red, stays on

   Mal-function: off or flashes irregularly

3.5 Operating Environment: Temperature: -10℃～50℃

   Relative Humidity: ≤ 95％RH, no condensing

3.6 Color: White

3.7 Weight: 89g(with base)

4 Structure and Operation Principle
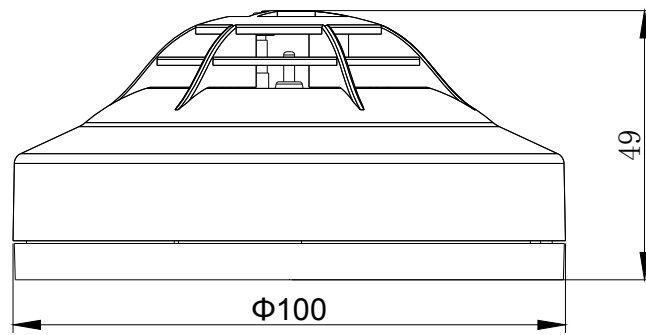
4.1 The structure and dimension are shown in Fig 1& Fig 2:

49

Φ100

Fig. 1: Appearance & Dimension

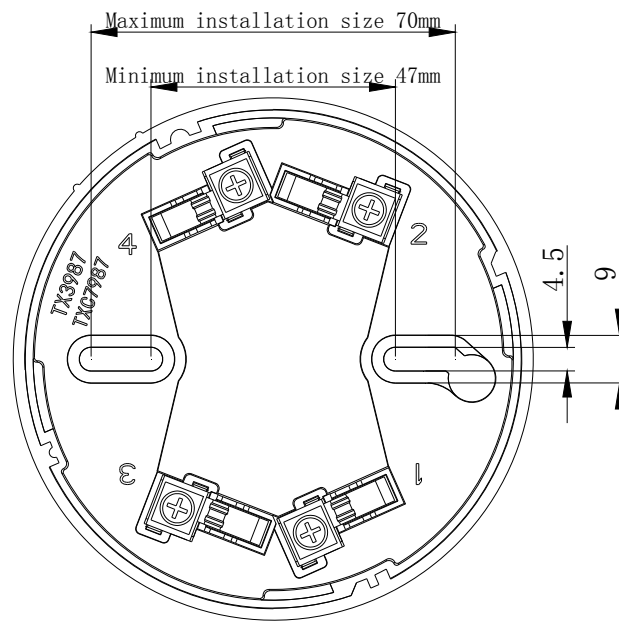Maximum installation size 70mm

Minimum installation size 47mm

Fig 2 TXC7987 Mounting Dimension

4.2 Operation Principle

This detector adopts thermo-sensitive resistor with negative temperature coefficient and its resistance value will decrease while the temperature increases, which results in the voltage change. When the voltage reaches the pre-set voltage threshold valve, this detector will send a fire signal to the controller to activate a fire alarm.

5 Mounting and Wiring

Warning: Before installing the detector, switch off the controller or disconnect the power from the loop and verify that all bases are securely installed and the wiring polarity is connect at each base.

5.1 Mounting:
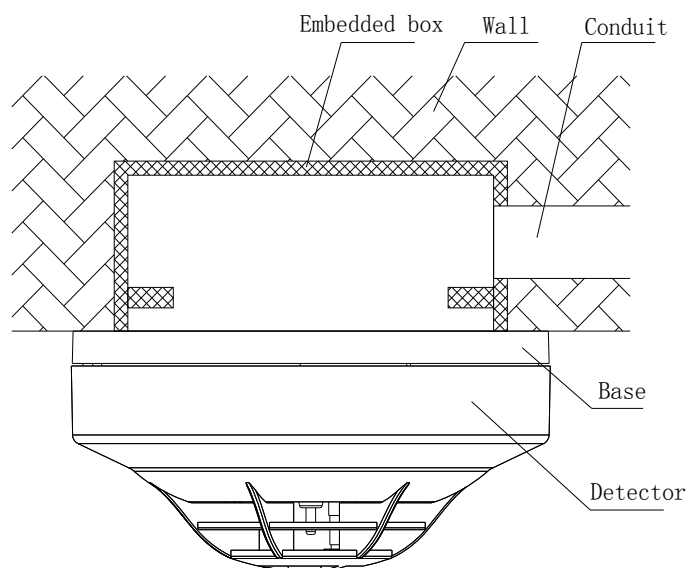The mounting of detector is shown in Fig.3.

Fig.3: TXC7111 Installation Drawing

The pre-embedded box can be the standard box with model 86H50; To install, align the two mounting lines

on both detector and base, then, rotate the detector clockwise to fit it to the base.

5.2 Wiring requirement:

RVS-2 x 1.02 mm^2 or 1.5 mm^2 cable laid through metal conduit or fire-retardant PVC conduit.

5.3 Wiring description
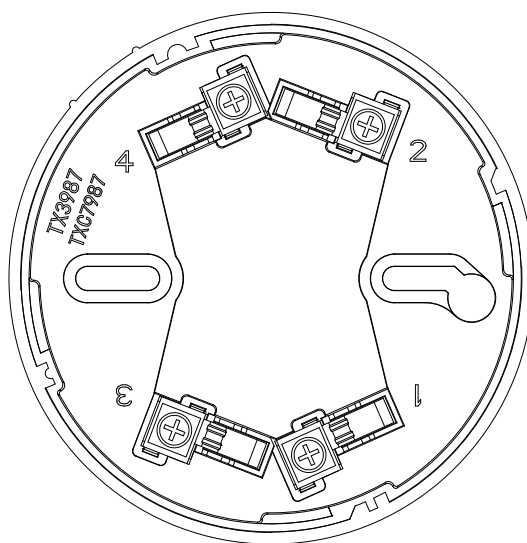
Wiring is shown in Fig.4:
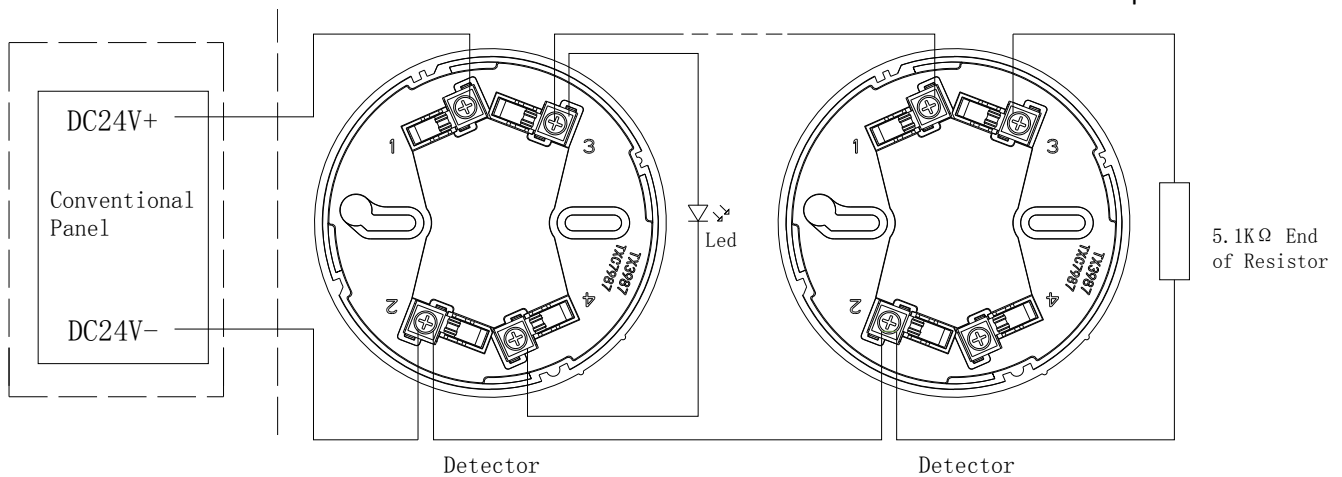

Fig.4: Single TXC7111 Wiring

Fig 5: Multiple TXC7111 Wiring

DC24V： 1(+) and 2(-) from panel or module,

3(+) and 2(-) connect to next detector.

Led(optional):3(+) and 4(-).(without connecting resistor outside)

6 Application and Operation

TXC7111 connects conventional control panel or zone monitoring module with non-polarized two wire. Zone monitoring module can monitor loop open circuit and send back mal-function signal of the device back to control panel. The module will display failure when any device removed from loop.

7 Handling and Storage

Detector handling and storage should be carried out under packaging status. Careful handling is needed to avoid damage. Detector shall be stored in the ventilated and dry environment. It is strictly forbidden to store the detectors in the open air.

8 Notes

8.1 Do not remove the dust-proof plastic cover from the detector before project inspection to avoid detector contamination.

8.2 Strict and complete on duty and shifts records are required to monitor the heat detectors in operation

8.3 Conduct the alarm function test once every half a year.

8.4 Please put the dust-proof cover onto the detector whenever decoration or painting is carried out to protect the detector from dust contamination.