

Features

- ◇ Real-time data sampling and process with integrated MCU.
- ◇ Drift compensation makes it environment adaptable.
- ◇ Removable optical sensing chamber for cleaning and maintenance.
- ◇ Indicating LED visible at 360 degrees.
- ◇ Magnetic-test function for on-site simulate alarm testing.
- ◇ Comply with EN54-7 standard.



Description

VG-6624 Conventional Smoke Detector (hereinafter referred to as Detector) is a product we developed with integrated MCU and reliable fixed fire judgment program that makes it work stably and reliably. When detecting fire signal, the detector changes its own supply current to transmit the signal to control panel or interface module. The detector lights fire indicator and remote indicator to show the alarm and will hold them until reset.

The detector is developed base on infrared scattering principle and high performance optical sensing chamber. It is excellent in resisting dust contamination and ambient light interference with stable performance and is easy to maintain.

Installation

First fix the detector base with two tapping screws, then align Mark A on the bottom of the detector to Mark B on the base, and then rotate the detector to Mark C on the base. Figure 1 show the marks. Figure 2 shows the Dimension of detector.

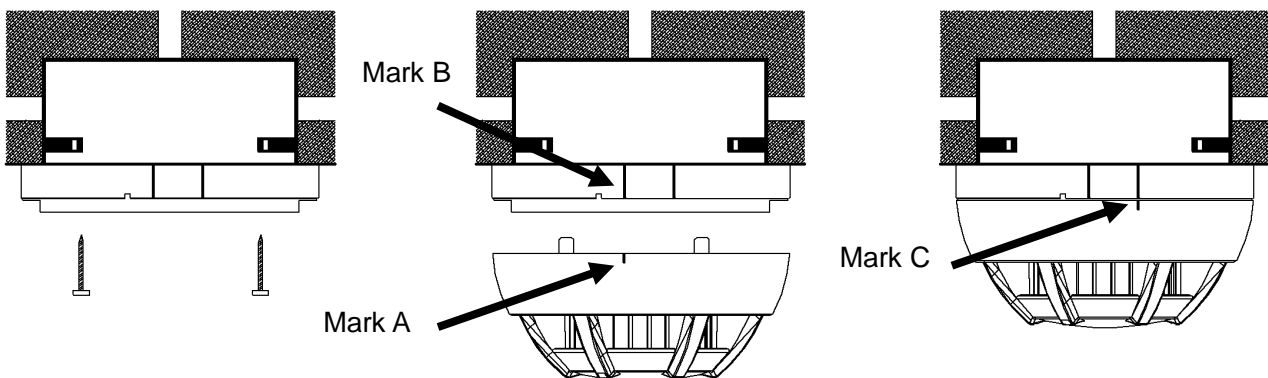


Fig.1.

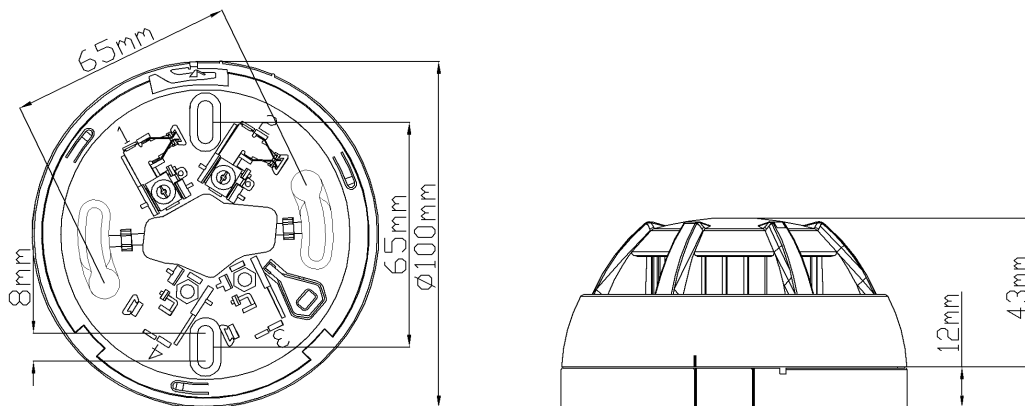


Fig.2.

Application

Warning: The alarm current is dependent on the current limit of the control panel. It's not allowed to use 24VDC supply. The detector without a current limit resistor might be burnt out!

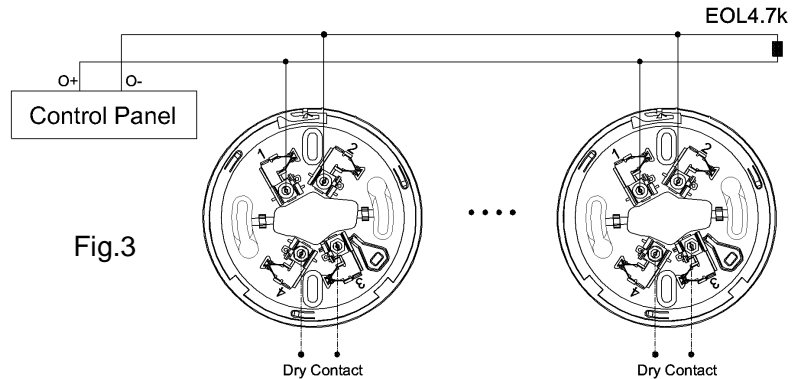
The detector is applicable to hotels, restaurants, office buildings, educational buildings, banks, warehouses, libraries, computer rooms and switch rooms. Maximum 20 conventional devices and an EOL resistor per loop when connect with conventional control panel. It's able to check broken circuit of output loop and generate loop fault signal.

Position for reed switch testing: The test tool should be put near the indicating lamp of the detector for 3 to 5 seconds.

Wiring Detail

◇ System connection shows in Fig.3

The detector need to be connected to conventional control panel. Must connect a 4.7k resistor at the end of the output loop.



Terminals	
1	Connected to the positive pole of DC supply end of a conventional control panel.
2	Connected to the negative pole of DC supply end of a conventional control panel.
3	COM (Dry contact)
4	NO (Dry contact)

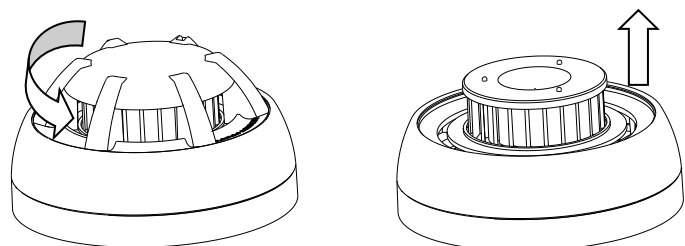
◇ Recommended Wiring:

1.0mm² or above fire cable for all terminals, laid through metal conduit or flame-proof conduit, subject to local codes.

Note: It's recommended to use cables of different colors to avoid incorrect wiring.

Maintenance

1. The detector should be properly stored against dust, moisture and corrosion and be installed just before commission.
2. The dust cover should not be removed until the system starts to operate. Otherwise it may not give fire alarm properly.
3. The detector should be cleaned at least once a year to ensure normal operation of the system.
4. When false alarm occurs frequently, the optical sensing chamber should be cleaned with the steps below, and, if necessary, replaced. Refer to Fig.4
 - a) Open the top cover and pull the sensing chamber out.
 - b) Clean the inside of sensing chamber with alcohol cotton using tweezers. Make sure no cotton fiber is left. Water and brush can be used alternatively.
 - c) Put the sensing chamber and top cover back.
5. Please inform governing administrative authorities that the system will be interrupted for maintenance. Disconnect controls to the affected area and system



automation to avoid any unwanted action.

6. Reinstall the detector after cleaning and test it.
7. The metal contacts on the detector and base should be protected against moisture and non-elastic deformation.
8. Do fire test once every half a year to ensure normal operation of the detector.

Specification

Operating Voltage	9VDC~28VDC
Standby Current	Max.280μA
Alarm Current	10mA≤I≤30mA
Alarm Indicator	Red. Flashes periodically (2s - 4s) normally; lights steadily in alarm.
Dry contact	Max.1A
Max Ripple Voltage	2V(peak-peak value)
Alarm Reset	Instant power cut(2s Min, 1.0VDC Max)
Power-up Time	≤10s
Wiring Method	Polarized two-wire
IP Rating	IP32
Ambient Temperature	-10℃~+55℃
Relative Humidity	≤95%, non-condensing
Material of Enclosure	ABS
Dimensions	Diameter 100mm, height 43mm (without base)
Mounting Hole Spacing	65mm
Weight	About 120g

Accessories & Tools

Model	Name	Note
VG-6611	Detector Base	To be supplied on order