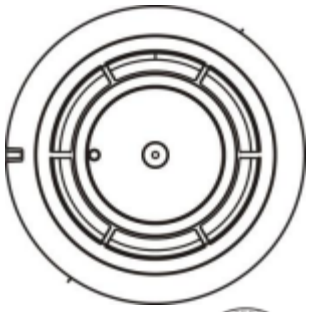
安装、使用本产品前，请阅读产品说明书!

C9020T点型感温火灾探测器

1 产品概述



1.1 C9020T 点型差定温式感温火灾探测器（以下简称探测器）是开关量型感温探测器，配接 DZ-912J 探测器底座（以下简称探测器底座）使用。探测器实时监测现场温度，监视状态时，红色指示灯闪烁，工作电流小；当现场温度超过设定的报警阈值后，探测器进入报警状态，红色指示灯常亮，回路电流增大，同时探测器底座继电器动作。探测器报警信号以继电器触点动作变化的形式给出，且具有报警锁定功能，报警的复位只能通过断电来实现。

1.2 探测器适用于火灾发生时有大量热产生的场所，如厨房、锅炉房、发电机房、烘干车间和吸烟室等工业与民用建筑。不适用于火灾发生时产生大量烟、少量热的场所，或可能发生阴燃的场所。

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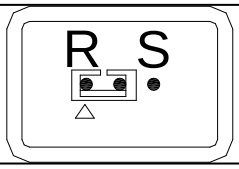
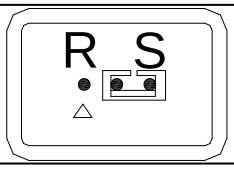
2 产品特点

2.1 采用上、下盖结构设计，安装、调试、维护简单方便。

2.2 内置微处理器，实时监测现场温度。

2.3 通过设置跳线选择探测器工作模式（默认 A2R 模式）：

模式	A2R 模式	A2S 模式
设置方法	短接 R 脚和中间脚	短接 S 脚和中间脚
跳线设置示意图 （位于探测器底部）		

3 产品技术参数

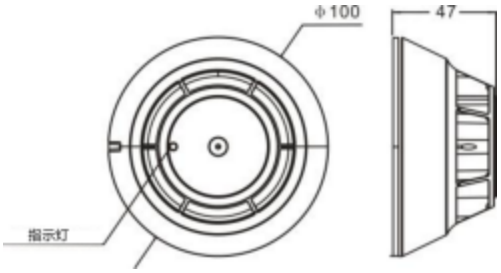
3.1

项目	参数
执行标准	EN 54-5（探测器）
报警温度	64°C@A2S
工作电压	DC 24V（允许范围：DC 12V~24V）
工作电流	监视状态＜0.5mA，动作状态＜19mA（@12V，常开型） 监视状态＜14 mA，动作状态＜7 mA（@12V，常闭型）
输出形式	继电器干接点输出，默认常开，监控时输出开路，报警时输出短路（用户可以自行设定）
触点容量	1A@30V DC、0.5A@125V AC
使用环境	温度：－10°C～+50°C，相对湿度≤95%(40°C±2°C无凝露)
接线方式	有极性，带防反接功能
工作指示	监视状态：探测器红色指示灯每 6s 闪烁一次，探测器底座黄色指示灯不亮 报警状态：探测器红色指示灯常亮，探测器底座黄色指示灯常亮 故障状态：探测器红色指示灯每 6s 闪烁两次
重　　量	约 145g

外形尺寸	直径 100mm，高 47mm（探测器）；直径 100mm，高 31.4mm（探测器底座）
防护等级	IP30

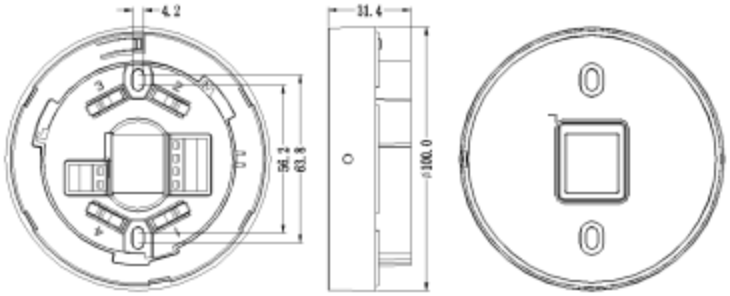
4 产品外观及尺寸

4.1 探测器：



（单位：mm）

4.2 探测器底座：



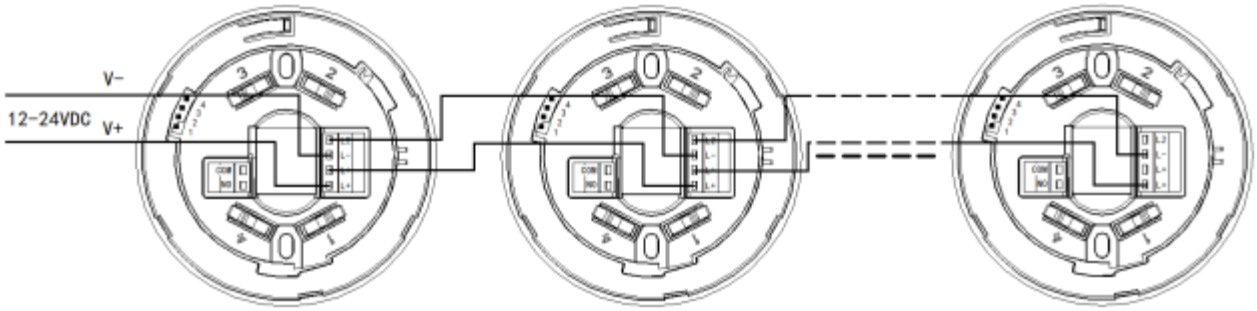
（单位：mm）

5 产品使用与工程应用

5.1 探测器底座安装示意图

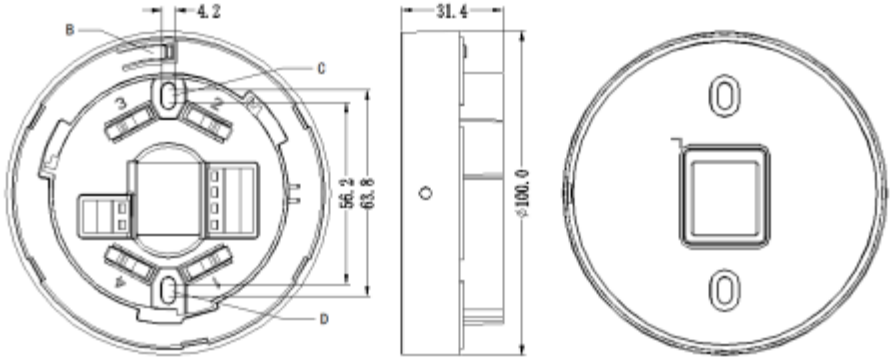
端子功能定义			
COM	继电器输出引脚	L2	直连弹片 2
NO	继电器输出引脚	L-	电源输入负极
1、2	短接时，为常开型	L+	电源输入正极
3、4	短接时，为常闭型	L+	电源输入正极

5.2 接线方式：多个探测器底座连接的示意图如图所示；



6 产品安装与调试

6.1 探测器的安装需要使用配套底座，探测器底座 DZ-912J 的安装尺寸如下图所示。外型尺寸为Φ100mm×31.4mm(直径×厚度)，固定孔直径为Φ4.2mm，固定孔间距为 56mm～64mm。



6.2 布线要求：应采用 RVS 型双绞线，截面积宜≥1.0mm²。

6.3 安装与调试的具体方法如下

- 确认探测器类型与本探测器底座是否相匹配；
- 确认探测器底座继电器的开关类型是否正确；
- 按施工图纸，使用 2 枚 M4 螺钉，通过上图中所示的 C、D 固定孔，将探测器底座固定在指定的位置上，确认底座已安装牢靠；
- 切断电源，按施工图纸，将探测器底座线缆正确连接；
- 将探测器的卡缝与底座防脱扣（上图中所示的 B 处）对准，再将探测器插入底座，顺时针方向旋转探测器，直至探测器锁定到位；
- 待全部产品安装完毕，确认无误后，接通电源；
- 探测器红色指示灯每 6s 闪烁一次，表明探测器已开始正常工作；
- 最后使用专用工具或热风筒直吹的方式对探测器进行报警测试。探测器报警后红色指示灯将常亮，探测器底座黄色指示灯常亮，同时继电器切换输出信号。测试结束后断电至探测器复位，再上电，使探测器回到监视状态。

7 注意事项⚠

7.1 禁止带电接线，禁止过压输入。

7.2 不建议使用在长期强震动环境下。

7.3 多探测器底座连接使用时要保证电源有足够的带载能力。

7.4 由于 L-和 L2 是通过探测器连通的，为了减少接触电阻的影响，一对电源引出线所串接的底座个数建议控制在 10 个以内，剩余的底座重新从电源处引出对线再接入。

7.5 随探测器附带的保护罩，在现场安装结束未开通使用前，请勿过早摘除，以免探测器受到污染。

7.6 报警测试时不允许使用明火（如打火机等）对感温器件加温，以免损坏探测器，建议使用热风筒等升温设备进行模拟报警测试。

8 维护与保养

8.1 ⚠警告：探测器在进行维护前，应通知相关管理部门，系统将进行维护，会因此而临时停止监控。同时应切断将进行维护的区域或系统的逻辑控制功能，以免造成不必要的报警联动。测试结束后，通知管理部门将系统恢复正常。

8.2 工作环境的好坏对探测器的性能有很大的影响，对在容易产生灰尘、高风速等影响正常使用的环境下安装使用的探测器，应缩短其维护保养的周期。

8.3 在合同约定的保质期内，按规定要求正常使用的探测器，如因材料或制造工艺的缺陷而失效，本公司将负责免费维修或更换。如属人为损坏、使用不当或自行调整、改动、拆开而导致的探测器失效，不属于保修范围，因此而造成的一切后果，本公司将不负任何责任。

8.4 本公司负责非保修范围内的产品的有偿维修，如有需要返修，请联系我们。同时，我们很希望能得到关于您要返修的产品的一些重要信息，如产品失效的情形和可能的原因，以便我们在最短的时间内找到问题，也给我们今后的产品开发和改进提供参考。

9 故障分析与排除

9.1

故障现象	可能原因分析	排除方法	备注
上电后不工作，1、3 脚弹片无电压	电源接反	按照线标指示正确接线	
	与底座接触不良	检查重新安装	
	内部电路损坏	需返回厂家维修	
报火警后继电器无动作	常开/常闭选择跳帽不对	用跳帽二选一	
	内部电路损坏	需返回厂家维修	
上电后报火警	内部电路损坏	需返回厂家维修	
测试不报火警	内部电路损坏	需返回厂家维修	
上电后红色指示灯每 6s 闪烁两次	传感器失效	需返回厂家维修	

扫码获取使用手册　　微信公众号

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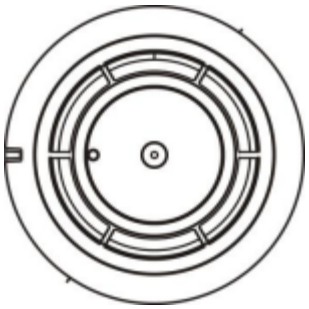
Please read this Manual carefully before installing and using the product .

C9020T Point-type Heat Detector

1 Product overview

(1) C9020T Point-type Rate of Rise and Fixed Temperature Heat Detector (Detector hereunder) is a switch-type temperature-sensing detector, is used with DZ-912J Detector Base(Detector base hereunder). The detector monitors the temperature of the site in real time. While monitoring, the red indicator blinks and the working current is low. When the temperature exceeds the preset alarm threshold, the detector alarms and the red indicator lights up, the loop current increases, while the detector base relay operates. The detector's alarm signal can be locked and is displayed by changes in the status of the relay contact. The alarm can only be reset by the power disconnection.



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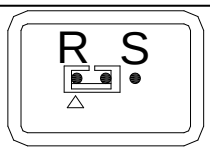
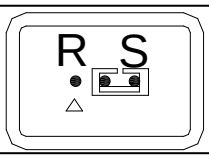
(2) The detector is applicable in places where fire might generate volume heat, e.g. in industrial and civil buildings such as in the kitchen, boiler room, generator room, drying plant, and smoking room. However, it is not suitable for places where volume smoke and low heat is generated during a fire, or a place where a smoldering fire might occur.

2 Product features

(1) Designed with an upper cover and a lower cover, it can be installed, debugged and maintained conveniently.

(2) Within a MCU, it can monitor temperature of the site in real time.

(3) Mode Select with jumper setting (A2R Mode default):

Mode	A2R Mode	A2S Mode
Setting method	Short R Pin & Middle Pin	Short S Pin & Middle Pin
Jumper setting diagram (located at the bottom of the detector)		

3 Technical parameters

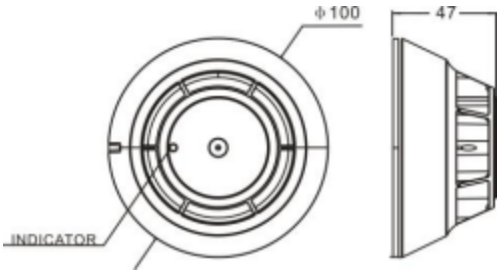
(1)

Item	Parameters
Executive Standard	EN 54-5 (Detector)
Fixed Temperature	64°C@A2S
Working Voltage	DC 24V (Allowance: DC 12V ~ 24V)
Working Current	Standby current <0.5mA , Alarm current <19mA (@12V, normally open) Standby current <14mA , Alarm current <7mA (@12V, normally closed)
Output Form	Relay dry contact output, normally open default, output open while monitoring , output short circuit while alarming (user can set their own)
Contact Capacity	1A@30V DC, 0.5A@125V AC
Operating Environment	Temperature: －10°C～+50°C Relative humidity≤95% (40°C±2°C, without condensation)
Wiring Method:	Polarity, with anti-reverse function
Working Indication	Monitoring status: Red indicator of the detector blinks once every 6s, yellow

	indicator of the detector base is off Alarm status: red indicator of the detector lights up, yellow indicator of the detector base lights up Fault status: red indicator of the detector blinks twice every 6s
Weight	About 145g
External Dimensions	Diameter: 100mm, height: 47mm(Detector); Diameter: 100mm, height: 31.4mm(Detector base)
Ingress Protection Rating	IP30

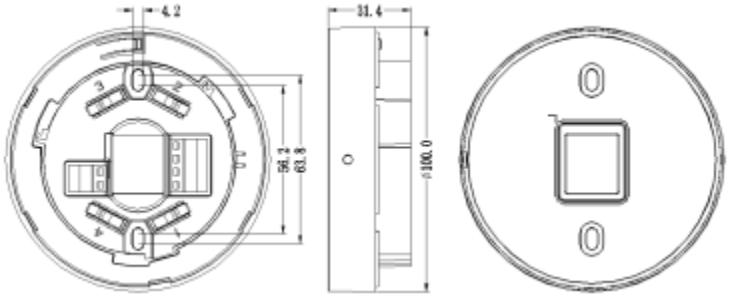
4 Appearance and dimensions

(1) Detector:



(Unit: mm)

(2) Detector base:



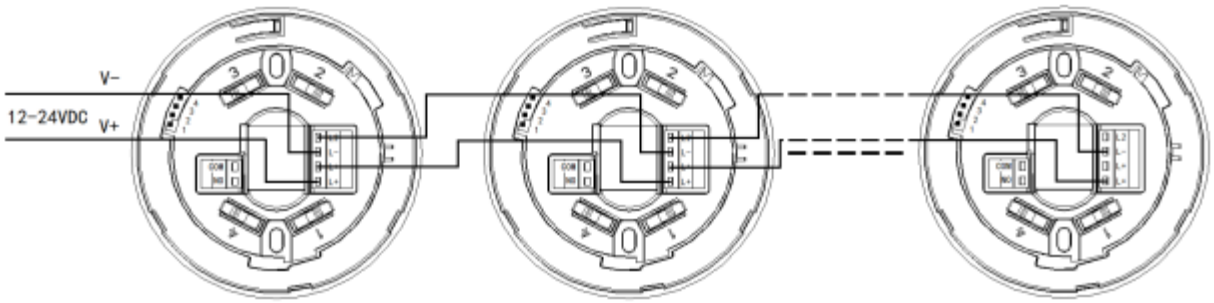
(Unit: mm)

5 Use and engineering application

(1) Detector Base Installation Diagram

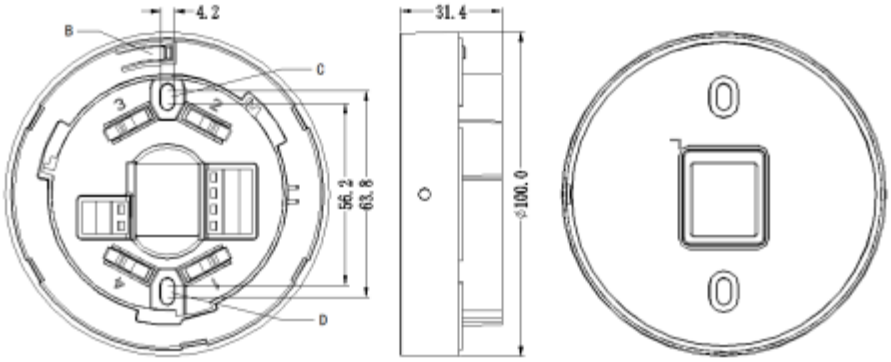
Definitions of terminals			
COM	Relay output pin	L2	Straight connect with shrapnel 2
NO	Relay output pin	L-	Negative pole of power input
1, 2	Normally open while short-circuited	L+	Positive pole of power input
3, 4	Normally closed while short-circuited	L+	Positive pole of power input

(2) Wiring method: The diagram of connecting multiple detector bases is shown in the figure.



6 Installation and debugging

(1) A supporting detector base is required to install the detector. The following figure shows the installation dimensions of the detector base DZ-912J. The outer size is 100mm×31.4mm(diameter × thickness), the fixed hole diameter is 4.2mm, and the fixed hole spacing is 56mm ~ 64mm.



(2) Wiring requirement: It is advisable to use RVS twisted pair with a cross-sectional area of ⩾ 1.0 mm².

(3) **Installation and commissioning steps**

- Verify that the detector type matches the detector base.
- Verify that the switch-type of the detector base relay is correct.
- Use two M4 screws to fix detector base on the designated position via the mounting holes C and D shown above, as instructed in the construction drawing and make sure detector base has been firmly installed.
- Disconnect the power supply and connect cables on the detector base correctly according to the construction drawing.
- Align the slot of the detector with the anti-trip latch of the base (B as shown in the figure above). Then insert the detector into the base and rotate the detector clockwise until it is firmly locked.
- After all the products are installed and checked, connect the power supply.
- When the detector is powered up, the red indicator of the detector will blink once every 6s, which suggests that the detector has begun to operate normally.
- Finally conduct an alarm test for the detector through some special tools or direct hot air gun blowing. After the detector gives a fire alarm, the red indicator of the detector and the yellow indicator of the detector base will remain on and the relay will switch output signal meanwhile. After the alarm test, power off the detector until it resets, and then power on to turn the detector back to the monitoring status.

7 Precautions⚠

(1) Live wiring is prohibited, over voltage input is prohibited.

(2) It's not recommended for use in long-term strong vibration environment.

(3) Ensure that the power supply has sufficient carrying capacity when is used by connecting multiple bases.

(4) Because L- and L2 are connected through the detector, in order to reduce the impact of contact resistance, it is recommended that the number of bases connected to a pair of power lead cables be controlled within 10, and the remaining bases are led out from the power source and connected.

(5) Never dismount the protective cover delivered with the detector too early after the field installation and before the use of the detector, or else the detector may be contaminated.

(6) It is not permitted to use open flames (such as lighters) to firing thermistor during alarm tests, so as to avoid damage to the detector. It is recommended to use a hot air gun and other heating equipment in a simulation alarm test.

8 Maintenance

(1) **⚠ Warning: Before conducting maintenance for a detector, inform the related management department that the monitoring will be stopped temporarily when the system maintenance. Meanwhile, disable the logic control function of the area or system to be maintained to avoid unnecessary alarm linkage. After the test, inform the management department to restore the normal functions of the system.**

(2) Operating environment has a great influence on the performance of the detector. If the detector is installed and used in a place where its normal use is easily affected by dust, high wind speed and other factors, its maintenance period should be shortened.

(3) If a detector fails due to a material defect or a manufacturing process defect under normal conditions of use within the warranty period stipulated in the contract, we shall repair or replace it for free. However, the faults of the detector due to artificial damage, improper use, or authorized adjustment, reconstruction or disassembly are not covered in the guarantee and we shall assume no responsibilities for any the consequence thereby caused.

(4) We may provide paid repair service for products with any faults beyond the guarantee range. If you have such products that need repair, please contact us. When sending such a product to us for repair, you are expected to provide some important information about the product, such as the phenomenon and possible cause of the product fault, so that we can find out the cause of the fault in the shortest time and so the information may be used as a reference in our future product development and improvement.

9 Fault analysis and troubleshooting

(1)

Failures	Causes	Methods	Remarks
Cannot work after powered up, shrapnel 1 and 3 has no voltage	Internal circuit is broken	Return to the manufacturer for repairs	
	Bad contact to the base	Inspect and reinstall	
	The power supply polarity is reversed	Follow the line mark instructions to wire correctly	
Relay does not operate after alarm up	Internal circuit is broken	Return to the manufacturer for repairs	
	Have not set the Normally open/Normally closed selection jumper	Use the jumper to select one of the two types	
Alarm after powered up	Internal circuit is broken	Return to the manufacturer for repairs	
Cannot alarm during test	Internal circuit is broken	Return to the manufacturer for repairs	
The red Indicator blinks twice every 6s after powered up	The sensor has failed.	Return to the manufacturer for repairs	

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