TCXH5415W Wireless fire hydrant button Installation   instructions

1.Overview

The TCXH5415W wireless fire hydrant button (hereinafter referred to as the fire hydrant button) is suitable for installation in public places. When the fire pump is manually confirmed to start, press the start button on the fire hydrant button, the fire hydrant button is always on, and it can be sent to the controller through wireless communication technology Start the signal and start the fire pump at the same time; after the fire pump has been started, the fire hydrant button answer light is always on, the fire hydrant button sends an answer signal to the controller through wireless communication technology, and the fire hydrant button enters the state of waiting for the controller to reset. The controller can display the coded information of the fire hydrant button and make a sound.

2.Features

2.1 Using a push-type structure design, the fire hydrant button needs to be reset with a special tool after it is pressed;

2.2 Adopting 470MHz wireless communication technology, without pre-buried wiring, convenient and quick engineering installation;

2.3 With battery low voltage detection function, it can reflect the battery power situation in time;

2.4 The use of microprocessor to realize signal processing and digital signal to communicate with the controller, the work is stable and reliable, and has a good ability to suppress electromagnetic interference.

3.Technical characteristic

3.1. Battery model: CR17450 (with wire)

3.2. Rated working voltage: 3.0V

3.3. Working current: monitoring current ≤15uA

Starting current≤10mA

3.4. Indicator light: Start light: red, always on when starting

Fault light: yellow, flashes twice every 48s when the battery is under power, and periodically flashes when the communication fails after being connected to the network

Working light: green, flashing periodically when the communication is normal after entering the network

Answer light: green, always on after receiving the answer signal

3.5. Coding method: automatically assigned by the controller during networking

3.6. Communication method: 470MHz FSK coded two-way communication

3.7. Communication distance: ≤50m

3.8. Transmitting power: <20dBm

3.9. Start mode: manually press the button

3.10. Reset method: special key reset

3.11. Starting parts form: reusable type

3.12. Use environment:

Type: Indoor Atmospheric pressure: 86kPa～106kPa

Temperature: -10℃～+55℃ Relative humidity ≤95%, non-condensing

3.13. Dimensions: 96mm×95mm×50mm

3.14. Shell material and color: ABS, red

3.15. Weight: about 190g (including battery)

3.16. Executive standard: GB 16806-2006 "Fire Fighting Linkage Control System"

XF 1151-2014 "General Requirements for Wireless Communication Functions of Fire Alarm Systems"

4.Structural features and working principle

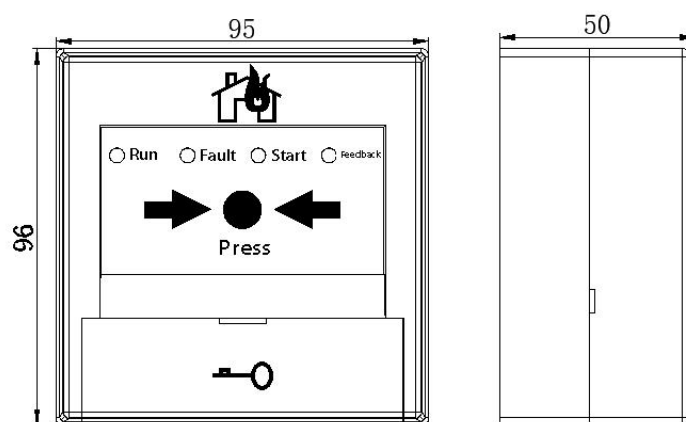4.1.The outline diagram of the fire hydrant button is shown in Figure 1:

Figure 1 Schematic diagram of the appearance of the fire hydrant button

4.2. working principle

The fire hydrant button adopts a pressing start mode, and self-locking through a mechanical structure, which reduces the phenomenon of man-made false triggering. After the start fire hydrant button is pressed, the start signal is triggered, and the start signal is sent to the controller through wireless communication. After the controller responds to the start signal, the start red light is always on; when it is confirmed that the fire pump has been started, the fire hydrant button is wirelessly controlled After the controller sends an answer signal, and the controller responds to the answer signal, the fire hydrant button answers and the green light is always on. When the battery of the fire hydrant button is low, the fire hydrant button wirelessly sends a battery undervoltage signal to the controller, and the yellow light flashes twice every 48 seconds.

5.Installation Method

5.1Before installation, first check whether the shell is intact and whether the identification is complete.

5.2. Fixing method of fire hydrant button:

　　When installing, you need to remove the front panel of the fire hydrant button, use two screws to fix the fire hydrant button base on the 86 series (width 72mm, height 49mm, depth 47mm) embedded box, and then install the fire hydrant button front panel, mounting holes 55mm away
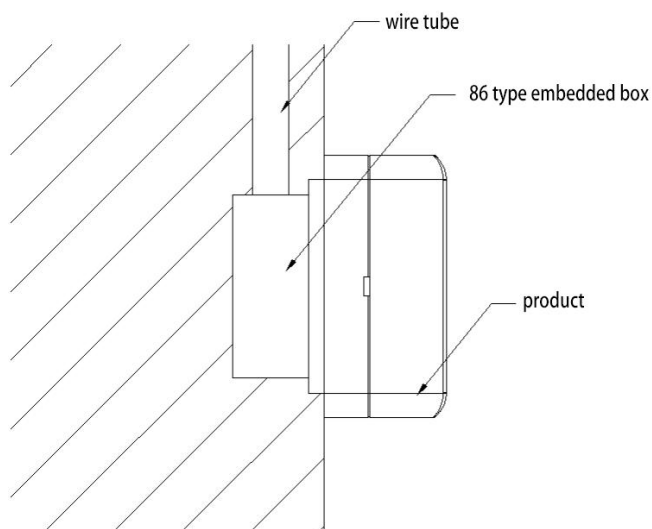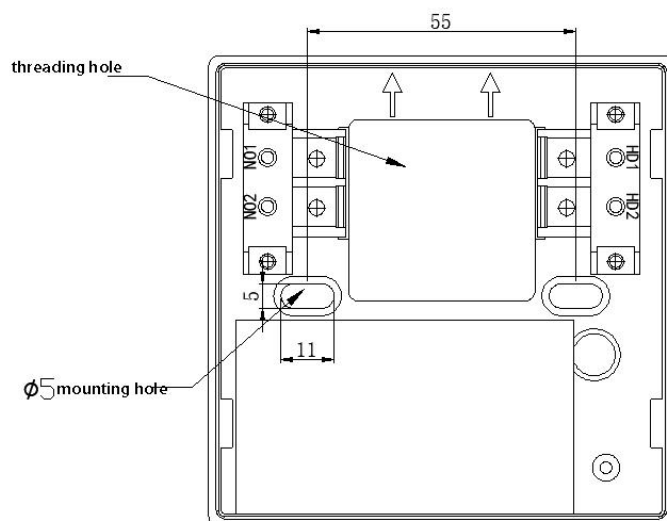
Figure 2 Installation method

Figure 3 Installation hole distance

HD1，HD2：Active answer signal input

NO1，NO2：Passive normally open output

6.Test

Warning: Please make sure that the polarity of the battery is correct before proceeding.

6.1. The fire hydrant button is tested every year after installation and during use.

6.2. Startup test: After the networking is successful, choose a fire hydrant button to artificially make it meet the starting conditions (please turn off the fire alarm linkage function to avoid unnecessary linkage), after the test is over, use the dedicated key to reset and notify the relevant management The department restored the system to normal.

6.3. Detectors that are unqualified during the test shall be resolved according to "general failure and maintenance" and "maintenance".

7.Use and operation

7.1. Network segment setting: Before the fire hydrant button enters the network, you should first set the device network segment. Select the network setting in the controller's menu interface. After entering the network setting, first set the local address number, and then set the fire hydrant button to enter the network according to the actual situation on site. segment.

7.2. The device enters and exits the network:

A) Network access operation: When the controller is in the "wireless registration interface" and the fire hydrant button is not connected to the network, quickly press the networking button 3 times, and at the same time the working green light flashes 3 times, the fire hydrant button sends a network access application to the controller, After the application is successful, the total number of network connections displayed by the controller +1.

B) Network exit operation: When the controller is in the "wireless registration interface", and the fire hydrant button is in the network connection state, press the networking button 3 times in quick succession, and the working green light flashes 3 times at the same time, the fire hydrant button sends back to the controller After the application is successful, the total number of withdrawals displayed by the controller will be +1.

C) Status detection: After the fire hydrant button is powered on, press the networking button once, the working green light flashes once, and the controller displays the detector loop address number to indicate that the detector has successfully connected to the network, otherwise the detector is not connected to the network.

7.3. Equipment start/start cancellation: When the start fire hydrant button is pressed, the fire hydrant button start red light is always on, the fire hydrant button sends a start signal to the controller wirelessly, and the controller responds to the start signal. After the start fire hydrant button is reset, the fire hydrant button start red light goes out, the fire hydrant button sends a start cancel signal to the controller wirelessly, and the controller will cancel the start signal of the fire hydrant button after responding to the signal.

7.4. Equipment answer/revocation of answer: After confirming that the fire pump has been started, the fire hydrant button answers the green light and the fire hydrant button sends an answer signal to the controller wirelessly, and the controller responds to the answer signal. After the fire pump has been started and restored, the fire hydrant button answers the green light to go out, the fire hydrant button sends an answer cancellation signal to the controller wirelessly, and the controller responds to the signal and cancels the answer signal of the fire hydrant button; it can also be turned on and answered by the controller linkage. light.

4. Device reset: special key reset.

7.5. Restore factory settings: After the fire hydrant button is connected to the network, when resetting

or powering on again, the start light will stay on for 10s. During this period, you can press the network fire hydrant button 5 times to restore the factory settings.

8.General faults and maintenance

The general faults and their solutions are shown in the following table:

Failure phenomenon	reason	Solution
The control panel has no status prompt after the device alarms	The device is not connected to the network	Restart the network operation
Device networking is unsuccessful	Too far away from the control panel or interference sources nearby	Move the device near the control panel, reconnect to the network and remove the source of interference
The device's red light is off	Low battery or no battery inserted	Replacement battery

9.Notes

9.1. After the signal passes through the wall, the signal strength will be greatly attenuated, so try to reduce the number of partition walls for wireless products.

9.2. When the product is installed, keep it away from metal to reduce the shielding of metal objects to the signal. For example, it cannot be installed in a metal box such as a fire hydrant box or outside of a metal cabinet.

9.3. Install in a low-interference environment and far away from motors or large-scale electrical equipment.

10.File and warranty

10.1 . Packing documents:

1) Packing List: 1 page

2) Instructions : 1 copy

10.2 . Warranty: My company responsible for the maintenance of the product , a problem please and my company's technical service department, the user may not own disassemble or repair, or peril .

10.3 . Maintenance contact the following: