PROTECTWELL

VBS-16H

Hydrant Button

Description

VBS-16H is an intelligent addressable fire hydrant button, which is compatible with the fire alarm system.

This module is usually installed in the indoor fire hydrant box to manually start the fire pump and monitor the pump running status. It can also be used in the two-wire bus alarm system to indirectly start the fire pump and receive the feedback signal of the pump status.

This module has a start lamp indicator and a reply (feedback) lamp indicator. The start lamp blinks in normal monitoring state. Manually press down the operation panel, the start lamp indicator is steady on, and latched on until the startup state is reset. When the pump starts it gives a reply feedback input signal, the feedback lamp indication on the module changes from off state to steady on and remains on until the pump stops working.

This module is provided with a set of normally open dry contacts, after pressing the operation panel, contact is closed, and can be directly interface to start an auxiliary relay connected to a fire pump.

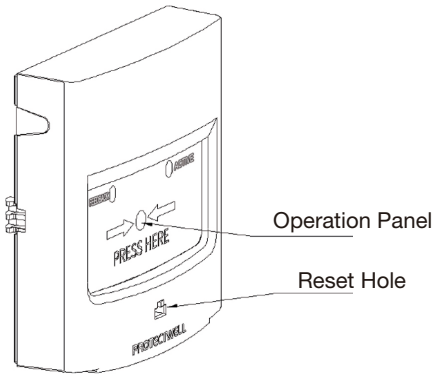

Figure 1: VBS-16H Hydrant Button

Addressing

VBS-16H hydrant button is an intelligent addressable module, each module in the loop must be uniquely addressed, its address is set by address coder/decoder handhold programmer CP600M, address range: 1~230. Please refer to the CP600M instructions for specific operations.

Terminal Description

VBS-16H hydrant button is used with H600 terminal base for VBS-16H, and its wiring terminals are defined as follows:

1	Fire pump start feedback	5	Normally open contacts
2	Fire pump start feedback	6	No
3	Communication	7	No
4	Communication	8	Normally open contacts

Specifications

Rated Voltage: DC24V.

Standby Current: 380μA@DC24V.

Alarm Current: 1.5mA@DC24V.

Normally Open Contact Capacity: 2A@DC24V.

Operating Temperature: -10°C ~ 55°C.

Operating Humidity: 5% ~ 95%RH Non-condensing.

Dimension: 90mm×86mm×37mm (Including base).

Weight: 65g.

Software Version: A.

Carried Standard: GB 16806-2006.

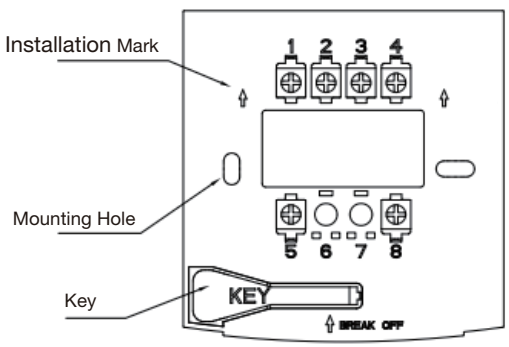

Figure 2: H600 Terminal Base for VBS-16H

Power Supply and Wiring

Power supply instruction

The design of the system is determined by calculated number of modules allowed in the loop according to the load capacity of the controller or power supply, ensuring that the sum of the current consumed by all devices in the loop does not exceed the load capacity of the controller or power supply. In the loop calculation, it is necessary to consider the voltage drop caused by the resistance of the line.

Resistance of general wiring sizes

1.0 mm² 19.5Ω/1000m

1.5 mm² 13.3Ω/1000m

2.5 mm² 7.98Ω/1000m

For example, if there are 10 devices in a certain area and each device needs 10mA, connect them with 1.5mm ² lines of 2000m (total line length = line length in operation + line length returned), and the current at the end of the line is 10mA, then: Number of devices x terminal current x (total length of lines x wire resistivity) = voltage drop, 10 x 10 mA x (2000m x 13.3 ohms /1000m) ≈ 2.7V

Wiring

VBS-16H hydrant button is used with H600 terminal base for VBS-16H, wiring as shown in Figure 3.

The communication line of this hydrant button adopts non-polarity wiring design, and does not distinguish positive and negative poles.

Mounting

Install the base at the predetermined installation position according to the direction indicated by the installation mark (Figure 2) on the H600 terminal base for VBS-16H.

Disconnect the power supply of the loop and wire according to the wiring diagram (Figure 3).

Use the address coder/decoder handhold programmer CP600M to address the manual call point.

Align the hook on the hydrant button with that on the H600 terminal base for VBS-16H, press into the mounting base (Figure 4), and the installation is complete.

Functions And Testing

Testing

NOTE: Before the test, please inform the relevant management department to disconnect the logic control function of the system in the maintenance area to avoid unnecessary alarm linkage and start of the water pump.

Press the black dot on the operation panel to make it move, and the yellow mark on the lower edge of the operation panel should be visible (as shown in Figure 5). The hydrant button should be displayed on the system to start, and the start lamp light is steady on.

Reset

Remove the key from the base (Figure 2), then as shown in Figure 5, insert the key into the reset hole (Figure 1) with moderate force. The operation panel will pops up. After the controller is reset, the start lamp blinks and the reset succeeds.

Remove

As shown in Figure 6, insert the straight screwdriver into the removal hole and pry the base with moderate force in the direction of the arrow until the latch is released. Repeat this operation on the opposite side to remove the hydrant button.

Ordering Information

VBS-16H: Hydrant Button.

VBS-16H/C*: Hydrant Button.

(CLIP model for legacy system).

H600: Terminal Base for VBS-16H.

NOTE: "/C" is ordering suffix and will not show on product label.

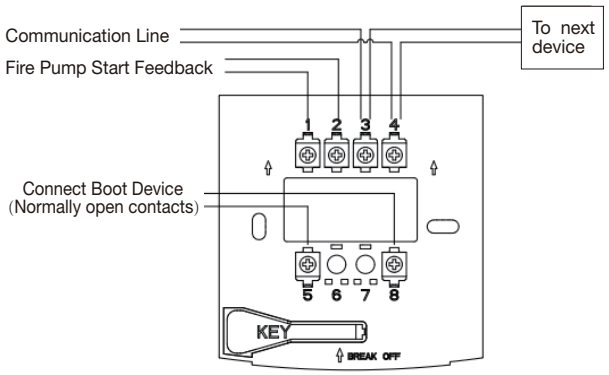

Figure 3: Wiring Diagram

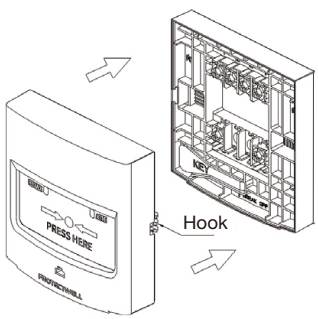

Figure 4: Mounting

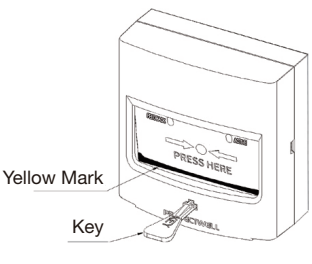

Figure 5: Reset

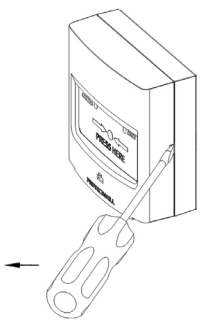

Figure 6: Remove