Honeywell

Excel Life Safety SYSTEM

XLS-278 and XLS-270 Manual Pull Stations

SPECIFICATION DATA

FEATURES

- **Single stage double action XLS-278 features a rugged Lexan housing**
- **XLS-270 models have traditional familiar appearance**
- **XLS-270 models are available for one stage (GA), two stage (pre-signal), and double action**
- **Break glass operation on XLS-270 models**
- **Intelligent device with integral microprocessor**
- **Non-volatile memory**
- **Automatic device mapping**
- **Electronic addressing**
- **Stand-alone operation**
- **Diagnostic LEDs**
- **Designed for high ambient temperature operation**
- **Designed to ISO 9001 standards**

DESCRIPTION

The XLS-270 and XLS-278 series Manual Pull Stations are part of Honeywell's Signature Series system. The XLS-270 Fire Alarm Manual Pull Stations feature a "teardrop" shape. They are made from die-cast zinc and finished with red epoxy powder-coat paint complemented by aluminum colored stripes and markings.

With positive pull- lever operation, one "pull" on the station handle breaks the glass rod and turns in a positive alarm, ensuring protection plus fool-proof operation. Pre-signal models (XLS-270P) are equipped with a general alarm (GA) key-switch for applications where two-stage operation is required. The "up-front" highly visible glass rod discourages tampering.

Honeywell's double action single stage XLS-278 station is a contemporary style station made from durable red colored Lexan. To initiate an alarm, first lift the upper door marked "LIFT THEN PULL HANDLE", then pull the alarm handle.

The integral microprocessor built into each Signature Series station provides four important benefits: Self-diagnostics and History Log, Automatic Device Mapping, Stand-alone Operation and Fast, Stable Communication.

Self-Diagnostics and History Log:

Each Signature Series manual station constantly runs self-checks to provide important maintenance information. The results of the self-check are automatically updated and permanently stored in the station's non-volatile memory. This information is accessible for review any time at the control panel, PC, or by using the SIGA-PRO Signature Program/Service Tool.

The information stored in the station's memory includes:
- Station serial number, address, and station type.
- Date of manufacture, hours of operation, and last maintenance date.

- Number of recorded troubles, alarms, and time and date of last alarm.
- Up to 24 possible trouble codes which can be used to specifically diagnose faults.

Automatic Device Mapping:

The loop controller learns where each device's serial number address is installed relative to other devices on the circuit. The loop controller keeps a "map" of the Signature Series devices connected to it.

Signature Series Data Entry Program also uses the mapping feature. With interactive menus and graphic support, the wired circuits between each device can be determined. Layout or "as-built" drawing information showing the branches (T-taps), device types and their address are stored on disk for printing hard copy. This takes the mystery" out of the installation. The preparation of "as-built" drawings is fast and efficient.

Device mapping allows the Signature loop controller to discover:
- Unexpected additional device addresses.
- Missing device addresses.
- Changes to the wiring in the circuit.

Stand-alone Operation:

A decentralized alarm decision by the station is guaranteed. On-board intelligence permits the station to operate in stand-alone mode. If loop controller CPU communications fail for more than 4 seconds, all devices on that circuit go into stand-alone mode. The circuit acts like a conventional alarm receiving circuit. Each station on the loop will still transmit an alarm if its operating lever is pulled.

Fast Stable Communication:

Built-in intelligence means less information needs to be sent between the station and the loop controller. Other than regular supervisory polling response, the station only needs to communicate with the loop controller when it has something new to report. This provides very fast control panel response time and allows a lower baud rate (speed) to be used for communication on the loop.

The lower baud rate offers several advantages including:
- Less sensitivity to circuit wire characteristics.
- Less sensitivity to noise glitches on the cable.
- Less emitted noise from the analog wiring.
- Twisted or shielded wiring is not required.

Diagnostic LEDs:

Twin LEDs provide visual indication of normal and alarm/active conditions. They are visible only when the station is removed from the mounting box. A flashing GREEN LED shows normal system polling from the loop controller. A flashing RED LED means the station is in alarm/active state. Both LEDs on steady shows alarm state in stand-alone mode.

Installation:

The Signature Series fire alarm manual pull stations mount to North American 2-1/2in (64 mm) deep 1-gang boxes and 1-1/2in (38 mm) deep 4insquare boxes with 1-gang covers. The terminals are suited for #14 to #18 AWG (1.5 mm^2 to 0.75 mm^2) wire size.

Honeywell recommends that these stations be installed according to local codes.

NOTE: This module will not operate without electrical power. As fires frequently cause power interruption, we suggest you discuss further safeguards with your fire protection specialist.

Electronic Addressing:

The loop controller electronically addresses each station, saving valuable time during system commissioning. Setting complicated switches or dials is not required. Each station has its own serial number stored in its "on-board memory". The loop controller identifies each device on the loop and assigns a "soft" address to each serial number. If desired, the stations can be addressed using the SIGA-PRO Signature Program/ Service Tool.

Application:

The operating characteristics of the fire alarm stations are determined by their sub-type code or "Personality Code". NORMALLY-OPEN, ALARM-LATCHING (Personality code 1) is assigned by the factory; no user configuration is required. The device is configured for Class B IDC operation. The ALARM signal is sent to the loop controller when the station's pull lever is operated. The alarm condition is latched the station.

Testing and Maintenance:

To test (or reset) the station, simply open the station using a special tool and operate the exposed switch.
The station's automatic self-diagnosis identifies when it is defective and causes a trouble message. The user-friendly maintenance program shows the current state of each Signature series device and other pertinent messages. Single devices may be deactivated temporarily, from the control panel. Availability of maintenance features is dependent on the fire alarm system used.
Scheduled maintenance should be planned according to local codes.

SPECIFICATIONS

Models:
XLS-270: One stage fire alarm station; English markings
XLS-270P: Two stage (pre-signal) fire alarm station; English markings
XLS-278: Double action, one stage fire alarm station; English markings

Addressing Requirements:
XLS-270/270F/270B: 1 module address
XLS-270P/270PB: 2 module addresses
XLS-278: 1 module address

Operating Current:
XLS-270/270F/270B:
Standby: 250µA
Activated: 400µA

XLS-270P/270PB:
Standby: 396µA
Activated: 680µA

XLS-278:
Standby: 250µA
Activated: 400µA

Construction and Finish:
XLS-270xx:
Die-cast zinc; red epoxy with aluminum markings

XLS-278:
Lexan, red with white markings

Type Code:
Factory set

Operating Voltage:
15.2 to 19.95V dc (19V dc nominal)

Environmental Limits:
Temperature: 32° to 120°F (0° to 49°C)
Humidity: 0 to 93% rh

LED Operation:
On-board green LED: Flashes when polled
On-board red LED: Flashes when in alarm/ active
Both LEDs: on steady when in alarm (stand-alone)

Compatibility:
Use with Signature Loop Controller

Accessories:
276-GLR: 20 glass rods; for XLS-278 only
27193-11: Single Gang Surface mounting box for XLS-270xx models only
276B-RSB: Surface mounting box, red for XLS-278 only

Figure 1: XLS-270L

Figure 2: XLS-278

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