



October 3, 1996

DN-5578 • I-308

4451HT

Plug-In 190°F Thermal Detector

Section: Conventional Initiating Devices

GENERAL

The 4451HT High Temperature Heat Detector has a 190°F (88°C) alarm set-point and is constructed out of flame-retardant Noryl plastic. It operates on 24 volts and has a low standby current of 100 microamps.

The 4451HT fixed intermediate temperature thermal detector is designed to meet the stringent performance requirements of industrial and municipal fire detection and alarm systems. The 4451HT thermal detector contains a unique dual thermistor sensing circuit to provide both maximum performance and solid state reliability. An RA400Z remote LED annunciator is available as an optional accessory.

FEATURES

- Dual solid-state thermistor sensing.
- 190°F (88°C) fixed-temperature response.
- Sealed against back pressure.
- Built-in test switch.
- Low standby current (100 microamps).
- Built-in tamper-resistant feature.
- Flame retardant Noryl plastic.
- 360° field viewing angle of the visual alarm LEDs.
- Easy plug-in of head to base.
- SEMS screws for easy wiring.
- UL Listed for 50-foot spacing.
- Three-year warranty.

SPECIFICATIONS

Operating voltage: mounting base dependent (see chart at right).

Standby current: 100 microamps.

Weight: 5 ounces (150 g).

Size: 2.1" (53 mm) high x 4.1" (104 mm) diameter.

Construction: Flame-retardant Noryl plastic.

Operating temperature: 32°F to 150°F (0° to 66°C).

Humidity range: 10% to 93% RH non-condensing.

Alarm point: 190°F (88°C).

Wiring: 12 to 18 gauge, twisted pair recommended.

ORDERING INFORMATION

4451HT Fixed-temperature thermal detector with alarm point at 190°F (88°C). **Must** be mounted to one of the B40X Series bases listed below (order separately).

4451HTA Canadian version of above.



S2101



CS630
(4451HTA)



California
State Fire
Marshal

7270-1209:105



OY7A3.AY

MEA
326-94-E



4451HT Plug-in 190°F Thermal Detector

MOUNTING BASE SELECTION GUIDE

| Base Model No. | Loop Style | Current Limit Resistor | Alarm Contact Type | Nominal Voltage | Current Draw on Alarm (mA) |
|----------------|------------|------------------------|--------------------|-----------------|----------------------------|
| B401B | 2-wire* | NO | — | 24 VDC ‡ | 10 – 100** |
| B402B | 4-wire | YES | Form A & C | 24 VDC | 14 – 39 |
| B404B | 4-wire | YES | Form A & C – Supv. | 120 VAC | 75 mA AC max. |
| B406B | 2-wire* | NO | Form C | 24 VDC | 12 – 100** |
| B401 † | 2-wire* | NO | — | 24 VDC ‡ | 10 – 100** |

*Functionality contingent on panel compatibility. **Must be limited by control panel. † Flangeless base. ‡ Although B401B and B401 bases are capable of 12/24 VDC operation, they cannot be used with the 4451HT in 12 V applications. **Relay Contact Ratings:** resistive or inductive (60% power factor) load. **Form A:** 2.0 A at 30 VAC/DC. **Form C:** 0.6 A at 110 VDC; 2.0 A at 30 VDC; 1.0 A at 125 VAC; 2.0 A at 30 VAC.

See wiring diagrams for bases on page 2.

RA400Z Remote annunciator for 2- or 4-wire systems, 3-32V. Use with most 400 Series plug-in detector bases. Fits standard U.S. single-gang electrical box.

SMK400 Surface mounting kit. Provides for entry of surface wiring conduit. Use with B401 or B401R mounting bases **only**.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact NOTIFIER. Phone: (203) 484-7161 FAX: (203) 484-7118

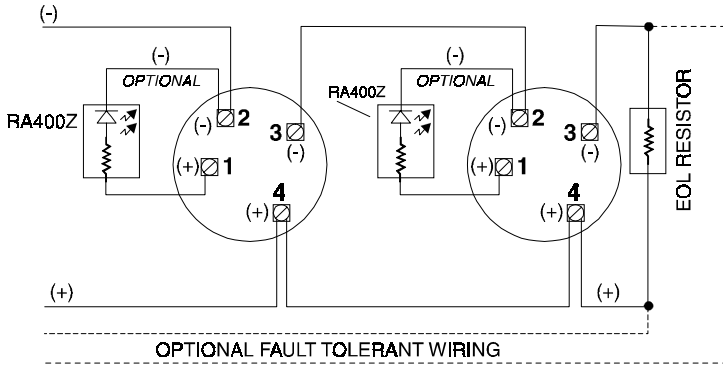


NOTIFIER

12 Clintonville Road, Northford, Connecticut 06472

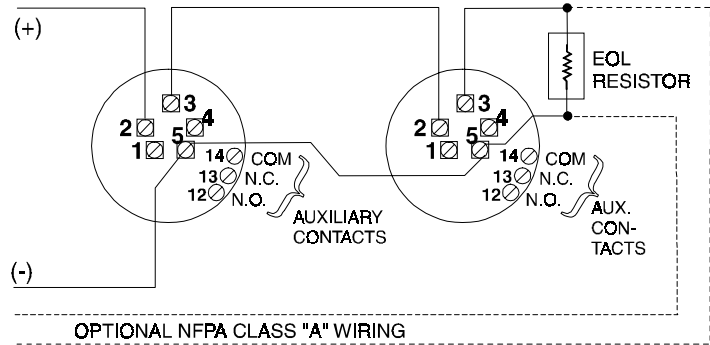
ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING

4451HT WIRING GUIDE

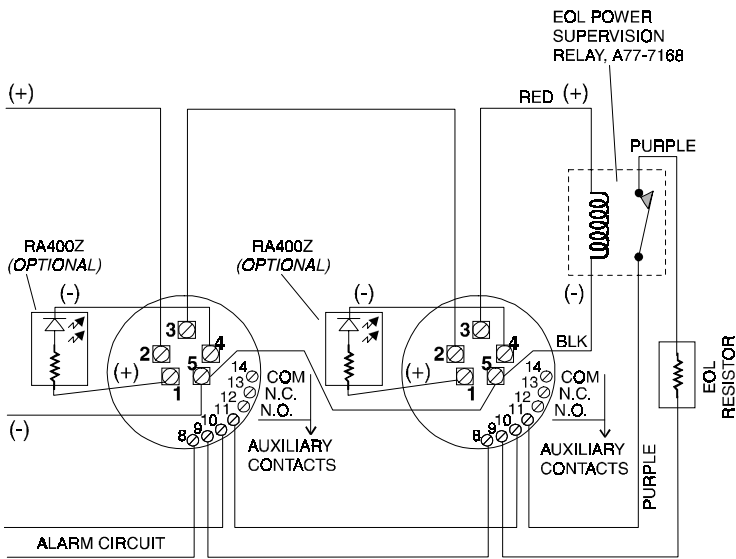


◀ B401B Wiring Diagram

B406B Wiring Diagram ▶



OPTIONAL NFPA CLASS "A" WIRING



◀ B402B Wiring Diagram

B404B Wiring Diagram ▶

