

SPECIFICATIONS

OPERATING VOLTAGE—

24 Vdc nominal (18 Vdc minimum, 30 Vdc maximum). Maximum ripple is 2 volts peak-to-peak.

POWER CONSUMPTION—

Without heater: 4 watts at 24 Vdc nominal;
5.2 watts at 24 Vdc in alarm.
4.5 watts at 30 Vdc nominal;
6.5 watts at 30 Vdc in alarm.
Heater only: 8 watts maximum.
Total power: 17 watts at 30 Vdc with EOL resistor installed and heater on maximum.

EOL resistor must be ceramic, wirewound type, rated 5 watts minimum, with actual power dissipation not to exceed 2.5 watts.

For HART model, refer to Addendum number 95-8577.

POWER UP TIME—

Fault indication clears after 0.5 second; device is ready to indicate an alarm condition after 30 seconds.

OUTPUT RELAYS—

Fire Alarm relay. Form C, 5 amperes at 30 Vdc: The Fire Alarm relay has redundant terminals and normally open / normally closed contacts, normally de-energized operation, and latching or non-latching operation.

Fault relay. Form A, 5 amperes at 30 Vdc: The Fault relay has redundant terminals and normally open contacts, normally energized operation, and latching or non-latching operation.

Auxiliary relay. Form C, 5 amperes at 30 Vdc: The auxiliary relay has normally open / normally closed contacts. It is configurable for energized or de-energized operation and latching or non-latching operation to perform as a secondary relay for fire alarm or fault.

CURRENT OUTPUT (OPTIONAL)—

0–20 milliampere (± 0.3 mA) dc current, with a maximum loop resistance of 500 ohms from 18–19.9 Vdc and 600 ohms from 20–30 Vdc.

LON OUTPUT—

Digital communication, transformer isolated (78.5 kbps).

TEMPERATURE RANGE—

Operating: -40°F to $+167^{\circ}\text{F}$ (-40°C to $+75^{\circ}\text{C}$).
Storage: -67°F to $+185^{\circ}\text{F}$ (-55°C to $+85^{\circ}\text{C}$).
Hazardous location ratings from -55°C to $+125^{\circ}\text{C}$.

HUMIDITY RANGE—

0–95% relative humidity, can withstand 100% condensing humidity for short periods of time.

CONE OF VISION—

The detector has a 90° cone of vision (horizontal) with the highest sensitivity lying along the central axis. Unlike conventional detectors, the X3301 provides full coverage at a minimum of 70% of the maximum detection distance.

Perfect cone of vision for methane fire detection — 100 feet (30.5 m) on and off axis on “very high” setting.

Refer to Appendix A for FM Approved cone of vision data.

RESPONSE TIME—

Typical response times are under 10 seconds. Models are available that can respond to automotive paint gun fires in under 0.5 seconds. See Appendix A and the Automotive Addendum, number 95-8534, for actual response times.

DIMENSIONS—

See Figure 19.

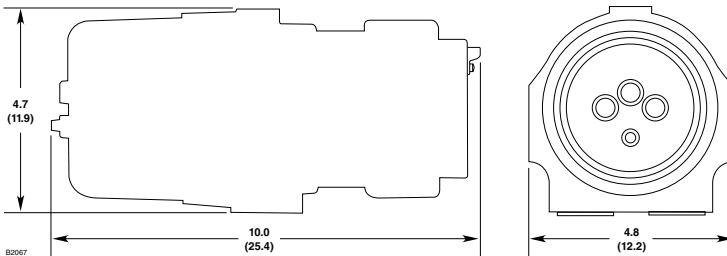


Figure 19—X3301 Dimensions in Inches (cm)