

Intelligent Air Duct Smoke Detector

Effective: January 2011

SmartOne®

FEATURES

- Accommodates Photoelectric and Ionization SmartOne Detectors
- Easily mounts to round or rectangular ducts 8 inches to 12 feet wide
- Air Velocity rating 500 to 4000 FPM
- Clear Lexan cover for easy viewing of smoke detector status and cleanliness
- UL Listed #S1064
- FM Approved #OB2A6AV
- ULC #CS194-E
- CSFM #3240-1076:121

DESCRIPTION

The SmartOne® Model DH-2000 Air Duct smoke detector is designed for detecting particles of combustion in air handling systems. Upon smoke detection the integral detection device will signal the SmartOne compatible control unit to which it is connected.

The duct detector housing accepts the SmartOne Intelligent CPD-7052 ionization and PSD-7152 photoelectric detectors. A transparent Lexan cover over the detection chamber allows visual inspection of the duct detectors chamber and internal detector status. Sampling air in HVAC ducts is accomplished with the use of sampling tubes which extend into the HVAC duct.

AIR HANDLING SYSTEM CHARACTERISTICS

The DH-2000 duct detector is suited for use in commercial, industrial, institutional and residential fire alarm applications.

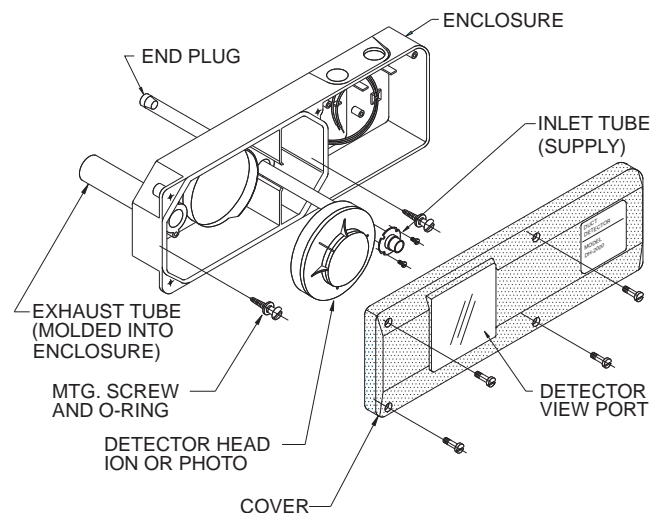
The DH-2000 will accommodate all ducts with air velocities between 500 to 4000 feet per minute. Both the photoelectric (PSD-7152) and the ionization (CPD-7052) smoke detector along with the duct housing will operate over this entire range. The duct detector is easily mounted to both rectangular and round ducts from 8 inches to 12 feet wide.



SAMPLING TUBES

The **DH-2000** duct detector operation is based upon an air sampling principle. Two sampling tubes extend into the HVAC duct to transport air from the inside of the duct into the duct detectors sensing chamber and exhaust it back out into the duct. If the sampled air contains a concentration of smoke greater than or equal to the alarm threshold of the internal smoke detector, the unit will go into alarm.

The duct detector's inlet supply sampling tube is selected according to the size of the HVAC duct. The unit's exhaust tube is molded into the housing to simplify installation.



When used with the DH-2000 unit, both the photoelectric (PSD-7152) and ionization (CPD-7052) detectors must be configured for Duct application when programmed in the control unit.