



**Model SD505-ADHR**  
**Duct Detector Housing with Relay Module**  
**and**  
**Model SD505-DTS**  
**Remote Test Switch**



**Detect smoke in air handling systems and prevent re-circulation with Silent Knight's addressable duct smoke detector**

The SD505-ADHR/DTS addressable duct smoke detector detects smoke and products of combustion present in air moving through an HVAC duct to prevent re-circulation of smoke into the air handling system. The SD505-ADHR is a heavy duty metal housing with a pre-installed detector base and relay module. When smoke is detected in a duct, the unit communicates the condition to the IntelliKnight FACP. The built-in relay module, in turn, turns off fans, blowers, and other devices.

The SD505-DTS is a remote test switch that is used with the SD505-ADHR so you can remote test the Duct Detector. It also provides LED indication of the status of the SD505-ADHR.

The SD505-ADHR/DTS is designed to be used with Silent Knight's SD505-APS Photoelectric Smoke Detector and SD505-AIS Ionization Smoke Detector.

## Models SD505-ADHR and SD505-DTS

### Features

- Two-wire connection to SLC
- LED alarm indication and communication on sensor head
- Rugged steel backbox with clear plastic cover
- Installation template included
- Large terminal connection screws
- Interchangeable "plug-in" photoelectric or ionization heads
- UL listed
- Operates on 24 VAC/VDC or 120/240 VAC

### Specifications

#### Included Parts:

- Metal housing with 7.5" exhaust tube
- SD505-4AB detector base
- Installation template
- 4 mounting screws

#### Parts not included with SD505-ADHR/DTS:

- Photoelectric Smoke Det. SD505-APS
- Ionization Smoke Det. SD505-AIS
- Sampling tube for 6" to 2.5' duct width STS-2.5

Sampling tube for 2.5' to 5.0' duct width  
STS-5.0

Sampling tube for 5.0' to 10.0' duct width  
STS-10.0

|                        |  |
|------------------------|--|
| Operating Voltage:     | 24 VAC/VDC<br>120/240 VAC                        |
| Current @ 24 VDC:      | Alarm: 75 mA Max.<br>Standby: 35 mA Max.         |
| SLC Current:           | Standby/Alarm: .082 mA                           |
| Alarm Relay:           | 10 A @ 24 VDC<br>10 A @ 120/240 VAC              |
| Trouble Relay:         | 2.5 A @ 30VDC                                    |
| Air Velocity:          | 500-4000 fpm SD505-APS<br>300-4000 fpm SD505-AIS |
| Sensitivity:           | 1.1 SD505-APS<br>0.8 SD505-AIS                   |
| Humidity:              | 10 to 85% RH                                     |
| Ambient Temperature:   | 32°F to 100°F<br>(0°C to 37°C)                   |
| SD505-ADHR Dimensions: | 10" H x 8.25" W x 2.25" D                        |



**SD505-ADHR**



**SD505-DTS**

SD505-DTS  
 Dimensions: 4.5" H x 2.75" W x 1-5/8" D

Color:  
 SD505-ADHR: Gray  
 SD505-DTS: Red



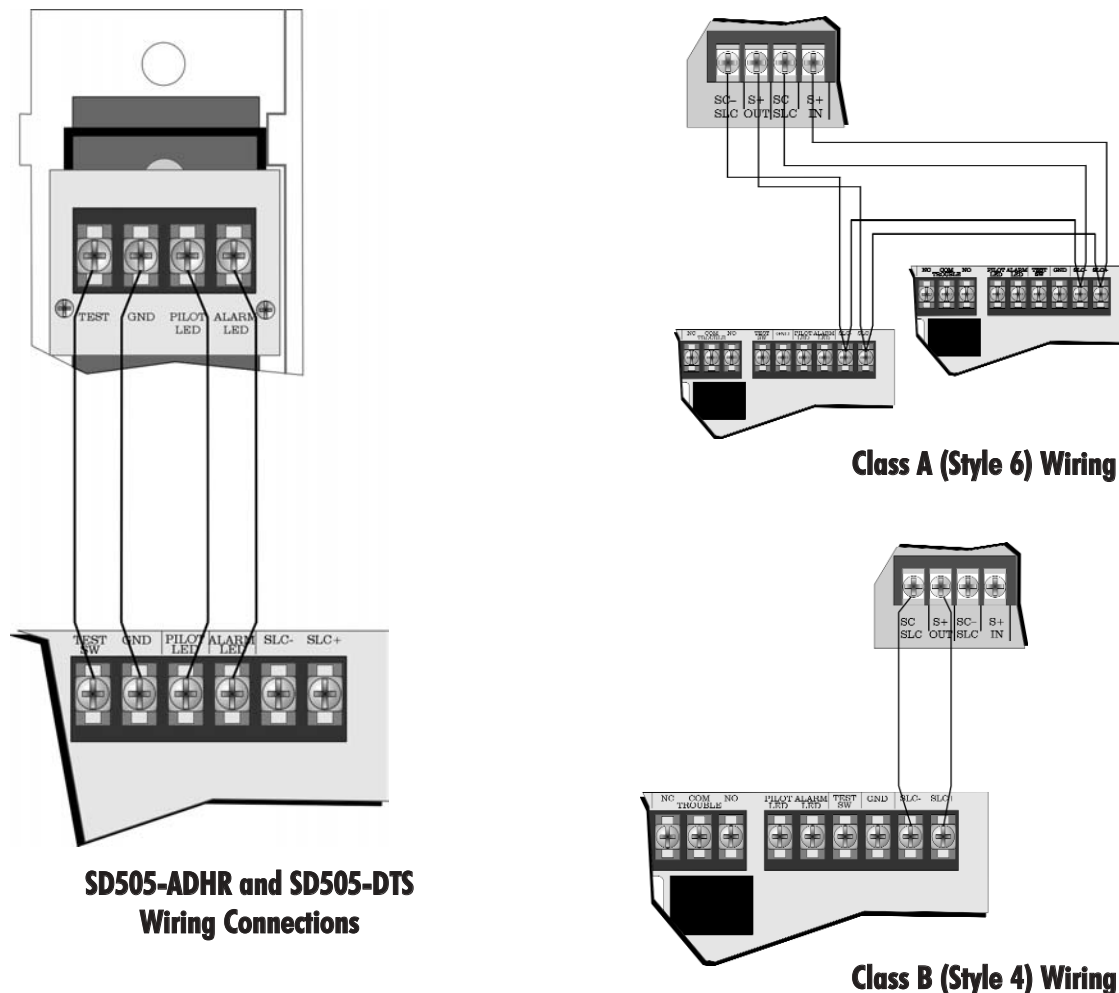
**SILENT KNIGHT**

## Model SD505-ADHR Duct Detector Housing with Relay Module and Model SD505-DTS Remote Test Switch



### Engineering Specifications

The air duct smoke detector with relay module remote test switch shall be Silent Knight module SD505-ADHR/DTS. The housing shall contain a detector base, Silent Knight model SD505-4AB. The detector base and housing shall be compatible with Silent Knight smoke detectors models SD505-APS and SD505-AIS. Alarm Relay rated at 10A @ 120/240 VAC and 24 VDC to control HVAC power. Module shall have separate LEDs that indicate normal or alarm condition. Module shall have a momentary key switch for testing of the duct detector.



**SD505-ADHR and SD505-DTS  
Wiring Connections**

**Class A (Style 6) Wiring**

**Class B (Style 4) Wiring**



**SILENT  
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**MADE IN AMERICA**

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