



## 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
- 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 120/240 VAC
Current @ 24 VDC:	
Alarm:	75 mA Max.
Standby:	35 mA Max.
SLC Current:	
Standby/Alarm:	.082 mA
Alarm Relay:	10 A @ 24 VDC 10 A @ 120/240 VAC
Trouble Relay:	2.5 A @ 30VDC
Air Velocity:	
500-4000 fpm	SD505-APS
300-4000 fpm	SD505-AIS
Sensitivity:	
1.1	SD505-APS
0.8	SD505-AIS
Humidity:	10 to 85% RH
Ambient Temperature:	32°F to 100°F (0°C to 37°C)
SD505-ADHR	
Dimensions:	10" H x 8.25" W x 2.25" D
SD505-DTS	
Dimensions:	4.5" H x 2.75" W x 1-5/8" D
Color:	
SD505-ADHR:	Gray
SD505-DTS:	Red



**SD505-ADHR**



**SD505-DTS**

#### Approvals

- UL listed
- CSFM
- MEA 429-92-E Vol XI

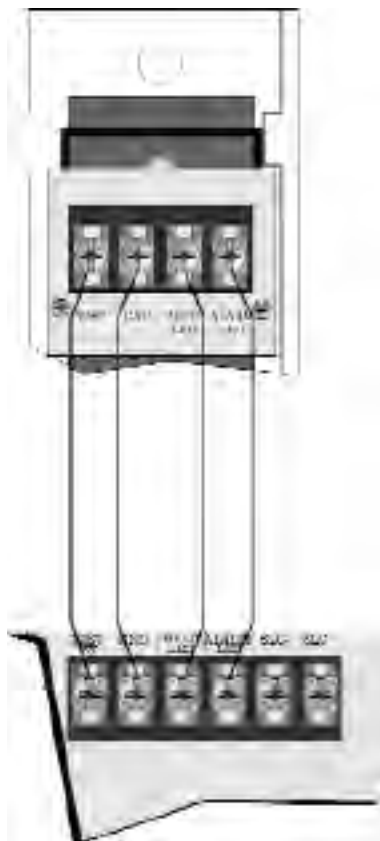


# SD505-ADHR Duct Detector Housing with Relay Module and SD505-DTS Remote Test Switch

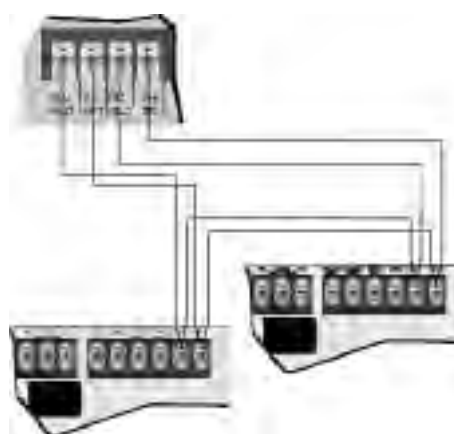


## Engineering Specifications

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**



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 Silent Knight 7550 Meridian Circle Suite 100, Maple Grove, Mn 55369-4927.  
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MADE IN AMERICA

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