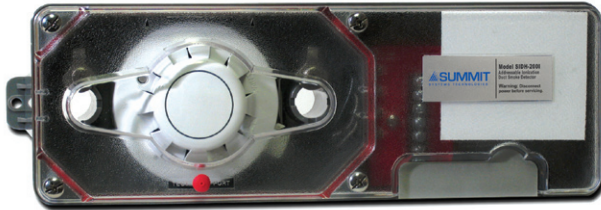
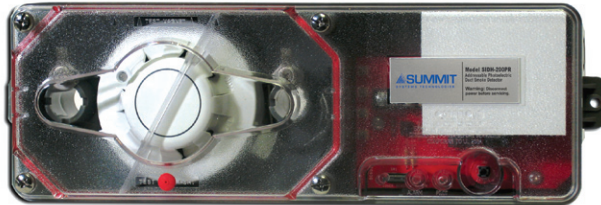


SIDH-200 SERIES Intelligent Duct Smoke Detectors



SIDH-200I
Intelligent Ionization Duct Detector



SIDH-200PR
Intelligent Photoelectric Duct Detector with Relay

Description

Summit's SIDH-200 Series Intelligent Smoke Duct Detectors are the latest analog addressable innovation for early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial, and Residential applications.

The Duct Detectors are designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers. Complete systems may be shut down via the building's fire alarm control panel (FACP) in the event of smoke detection.

The SIDH-200 Series are Low-Flow Ionization and Photoelectric air duct smoke detectors that are capable of sensing smoke in air velocities from 100 to 4,000 feet per minute (0.5 to 20.32 m/sec). Low-flow technology can detect smoke at air speed velocities of 100 feet per minute or greater, while continuing the same reliable performance to 4,000 feet per minute.

The SIDH-200 Series are designed and built to meet all local code requirements, as well as the NFPA and ICC standards regarding HVAC supply and return duct smoke detectors. Output terminals are provided for a remote alarm indicator accessory.

Features

- Low-Flow Technology: Both Ionization and Photoelectric models listed for velocities between 100-4000 ft./min
- Both Ionization and Photoelectric models listed for high temperature applications
- Units supplied with slide-in SIB-ADD Address Card for easy device addressing
- Patent pending "No-Tools Required" front or rear loading and removing sampling/exhaust tubes
- Patent pending "Test Port Valve" allows for aerosol smoke testing without cover removal
- Clear cover fitted with four captive "No-Tools Required" thumbscrews
- Instantaneous cover removal trouble indication
- Vertical terminal block for easier wiring
- Steady red LED on detector head indicates alarm
- More wiring space than competitive models
- Footprint allows easy retrofit in many applications without additional drilling
- Duct wall gaskets on back of enclosure are pre-installed
- External mounting tabs do not require cover removal to install
- Colored cover gasket indicates proper cover seal
- Large terminal connection screws
- SIDH-200 Series interchangeable "plug-in" UL268 photoelectric or ionization heads
- Advanced detector head design yields internal dust filtering
- No additional screens or filters to clean
- Compatible with the SFC-500 Series Fire Alarm Control Panels
- Complete wiring details permanently attached to unit

SIDH-200IR/SIDH-200PR (with relay)

- Operating voltages: 24VAC or 24VDC
- In-line terminal block for easier wiring
- Remote accessories available
- Includes green pilot and red alarm visual indicators
- One set of 15A form "C" alarm contacts



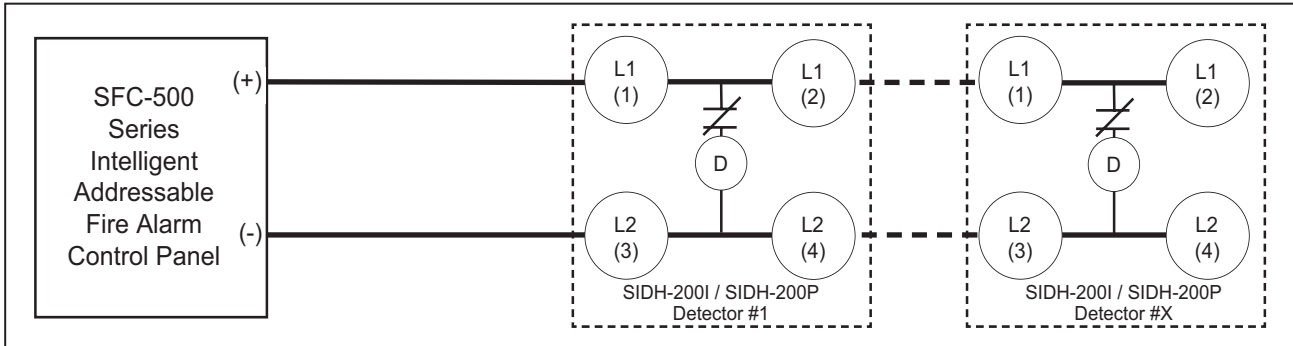
3240-1665:108
(SIDH-200IR & SIDH-200PR)
3240-1665:107
(SIDH-200I & SIDH-200P)



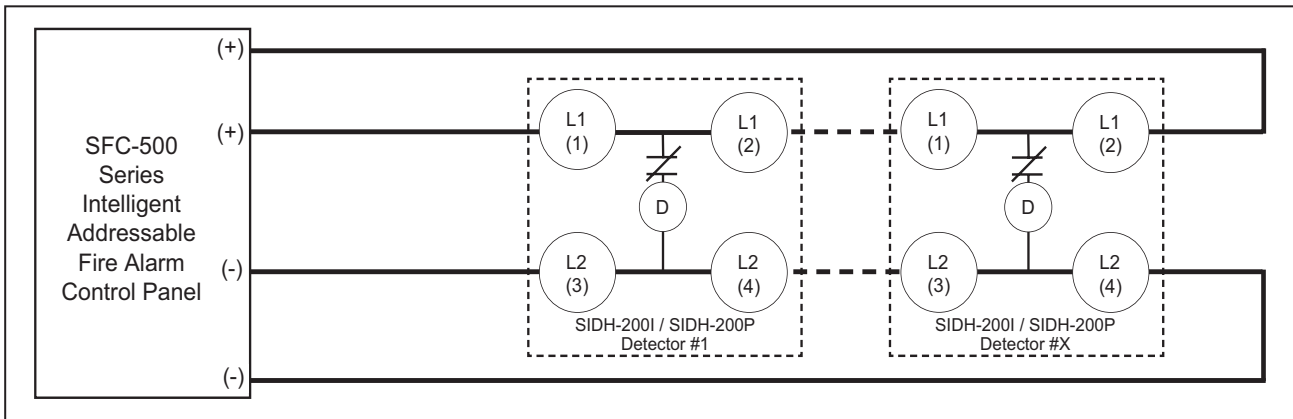
S24141

SIDH-200I/SIDH-200P Specifications

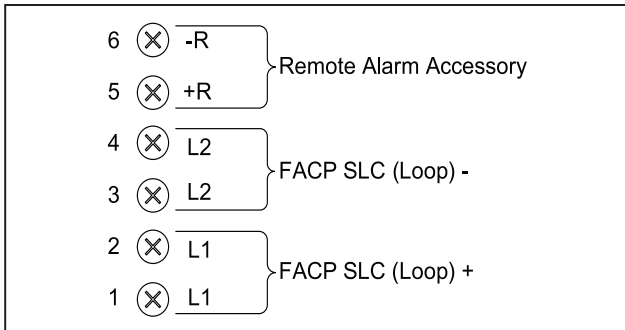
SIDH-200I/SIDH-200P Class “B” Wiring Diagram



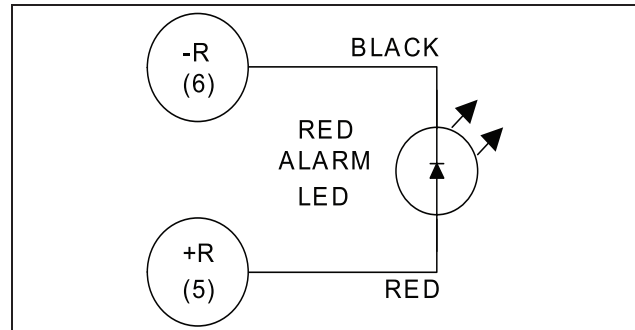
SIDH-200I/SIDH-200P Class “A” Wiring Diagram



Terminal Connections



Remote Accessory Wiring

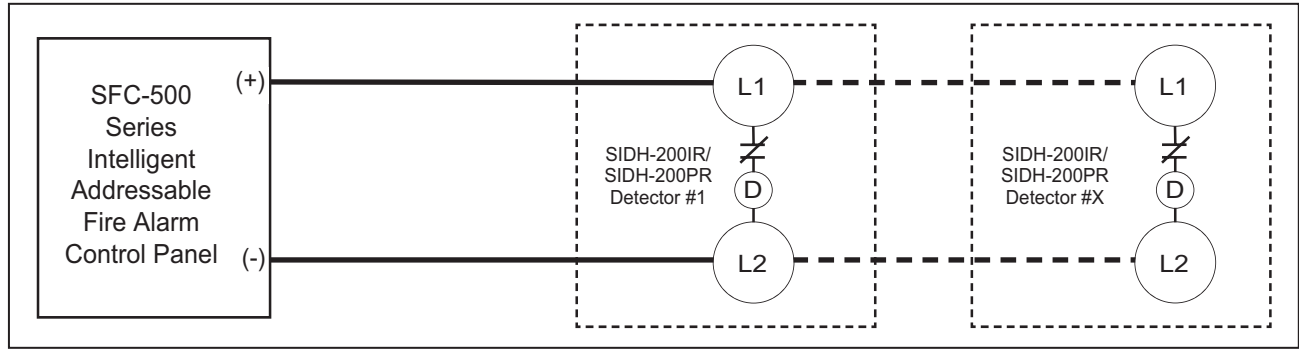


Engineer Specifications

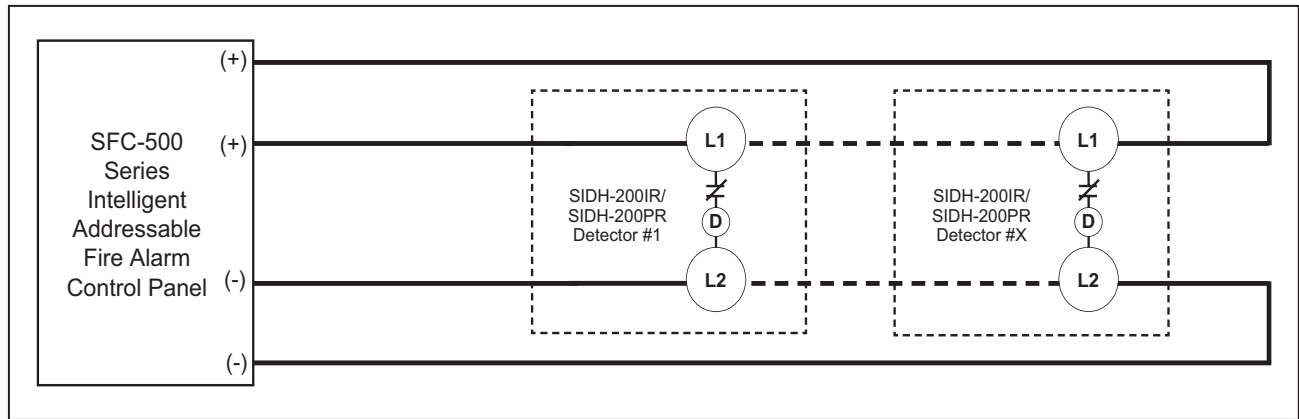
- Air duct smoke detectors shall be Summit SIDH-200 Series. For ionization detectors the model number is SIDH-200I. For photoelectric detectors the model number is SIDH-200P. The detectors shall be listed by Underwriters Laboratories per UL 268A.
- The detectors shall operate at air velocities from 100 feet per minute to 4,000 feet per minute and at temperatures of no less than 140°F (60°C).
- Visual indication of alarm and power must be provided on the detector.
- Air handling unit shut down shall be accommodated via the associated FACP.
- Detector head shall not require additional filters or screens which must be maintained.
- The housing shall contain a detector base which will accept photoelectric or ionization detector heads as well as a means of detector addressing.
- Terminal connections shall be of the screw type, a minimum of #6 screw (#12 to #22 AWG compatible). Terminals shall be provided for remote alarm indication. All wiring must comply with local codes and regulations.
- A method of testing the alarm function with a magnet must be provided.
- A method of smoke testing the detector without removing the cover must be provided.
- All unit, remote accessory, and common function connection designations must be permanently affixed to the unit.
- Cover and sampling/exhaust tube installation or removal must not require the use of tools.
- Sample and exhaust tubes shall be capable of removal/installation from the front and/or rear of the detector for inspection/maintenance.

SIDH-200IR/SIDH-200PR Specifications

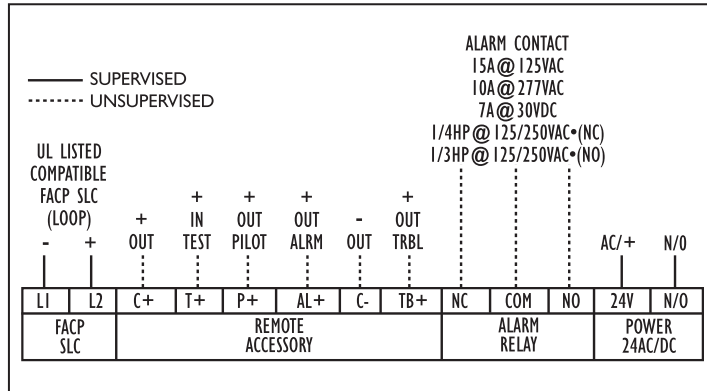
SIDH-200IR/SIDH-200PR Class “B” Wiring Diagram



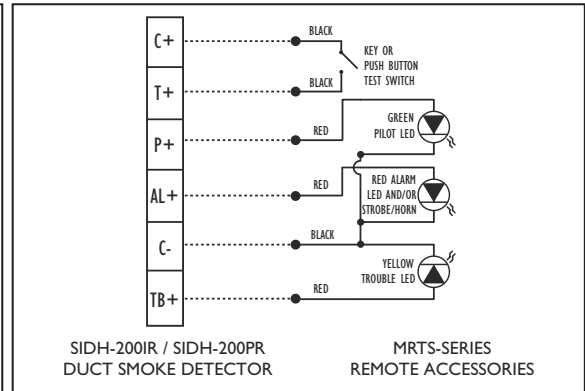
MSIDH-200IR/SIDH-200PR Class “A” Wiring Diagram



Terminal Connections



Remote Accessory Wiring



Engineer Specifications

- Air duct smoke detectors shall be Summit SIDH-200 Series. For ionization detectors the model number is SIDH-200IR. For photoelectric detectors the model number is SIDH-200PR. The detectors shall be listed by Underwriters Laboratories per UL 268A.
- The detectors shall operate at air velocities from 100 feet per minute to 4,000 feet per minute and at temperatures of no less than 140°F (60°C).
- Visual indication of alarm and power must be provided on the detector front.
- A manual relay/test switch located on the front of the device shall be provided.
- Detector head shall not require additional filters or screens which must be maintained, and shall include both a standby and alarm visual indication.
- The housing shall contain a detector base which will accept photoelectric or ionization detector heads as well as a means of detector addressing.
- Terminal connections shall be of the screw type, a minimum of #6 screw (#12 to #22 AWG compatible). Terminals shall be provided for remote alarm indication. All wiring must comply with local codes and regulations.
- A method of smoke testing the detector without removing the cover must be provided.
- All unit, remote accessory, and common function connection designations must be permanently affixed to the unit.
- Cover and sampling/exhaust tube installation or removal must not require the use of tools.
- Sample and exhaust tubes shall be capable of removal/installation from the front and/or rear of the detector for inspection/maintenance.

Electrical Specifications

Air Velocity	100 to 4,000 ft./min.	
Ambient Temperature	SIDH-200I	32°F to 150°F (0°C to 66°C)
	SIDH-200IR	
	SIDH-200P	32°F to 140°F (0°C to 60°C)
	SIDH-200PR	
Humidity	10% to 95% R.H. Non-Condensing/Non-Freezing	
Wiring	#12 to #22 AWG terminals	
Material	Grey plastic backbox, clear plastic cover	
Dimensions	L-13½" X H-4½" X D-2 ¼"	
Max. Net Weight	SIDH-200I / SIDH-200P	2 lbs.
	SIDH-200IR / SIDH-200PR	2¼ lbs.
Radioactive Element	For SIDH-200I/SIDH-200IR (Ionization) Americium 241; 0.9 Micro-Curie Do Not Expose to Corrosive Atmospheres	
Hardware	7" exhaust tube, sampling tube end cap, mounting template and mounting hardware included	

SIDH-200IR/SIDH-200PR Electrical Specifications

Relay Contact Ratings

Alarm Contacts	Resistive Load	1 set form "C" rated at 15 Amps @ 125VAC 10 Amps @ 277VAC 7 Amps @ 30VDC
	Inductive Load	¼ HP @ 125/250VAC (NC) ½ HP @ 125/250VAC (NO)

Control Board Power Requirements (without accessories)

Standby	24VAC	105 mA	Alarm	24VAC	195 mA
	24VDC	26 mA		24VDC	54 mA

Ordering Information

Model	Description
SIDH-200I	Intelligent Ionization Low-Flow Duct Smoke Detector
SIDH-200IR	Intelligent Ionization Low-Flow Duct Smoke Detector with relay
SIDH-200P	Intelligent Photoelectric Low-Flow Duct Smoke Detector
SIDH-200PR	Intelligent Photoelectric Low-Flow Duct Smoke Detector with relay
MSTN-1.0	Sampling tube for 12" or less duct width
MSTN-2.5	Sampling tube for 6" to 2.5' duct width
MSTN-5.0	Sampling tube for 2.5' to 5.0' duct width
MSTN-10.0	Sampling tube for 5.0' to 10.0' duct width