

Specialized Devices

Air-Duct Housings → FDBZ Series

Models FDBZ492, FDBZ492-HR, FDBZ492-R and FDBZ492-RP (with FDBZ-WT and FDBZ492-RTL)

ARCHITECT AND ENGINEER SPECIFICATIONS

- Four (4) models available
 - Addressable and conventional (with and without relays)
- Compatible with Siemens – Fire Safety conventional and addressable fire-alarm control panels (FACPs)
- Magnet test feature with the Model OP121 conventional detector
- Design for air-velocity range of 100 to 4,000 feet-per-minute (fpm)
- Robust, compatible conventional remote indicator test switch that incorporates tri-color light-emitting diode (LED)
- Clear housing cover with smoke test port on cover for quick identification of detector type
 - Removable with four (4) captive-thumb screws (no tools required)
 - Includes a smoke / aerosol detector test port
- Optional NEMA 4X-reinforced, stainless-steel and watertight enclosure available, Model FDBZ-WT
- No tools required for cover removal, sampling and exhaust-tube installations
- *Trouble*-event activation upon front-cover removal
- *Alarm* LED visible from front



Remote alarm indicator
(Model FDBZ492-RTL)



FDBZ-series of air-duct housings
(FDBZ492, FDBZ492-HR, FDBZ492-R and FDBZ492-RP)



Watertight housing
(Model FDBZ-WT)

- Self-contained model available with 'on-board' power supply for conventional detectors
- Expanded temperature range
- Relay models available
- UL 268A Listed, ULC -S529 Listed; FM (#3010), CSFM (#3240-0067:0265) Approved

Product Overview

The Siemens – Fire Safety Model 'FDBZ'-series of air-duct-detector housings are designed to be used with the Siemens Model 'H'-series, 'FD'-series and the Model OP121 detectors. Designed for installation directly to heating, ventilating and air-conditioning (HVAC) duct systems, the Model 'FDBZ'-series complies with National Fire Protection Association Standard (NFPA) No.'s 72 and 90A, and is Underwriters' Laboratories Listed.

When equipped, the air-duct detector housing will signal the presence of smoke being carried through the duct system. Air-duct detectors are not intended to be substituted for open-area detection.

Notes: Most conventional time-control equipment guarantee only one (1) detector per zone when the detector's operated relay function is critical. The connection of a remote lamp and a remote relay –per detector – is allowed. Refer to the installation manual for the respective conventional fire system.

Notes – (cont.'d): With either the Desigo[®] series or FireFinder[®] XLS series of FACPs, up to 252-addressable detectors with relays per circuit may be used. The connection of an intelligent remote lamp (ILED) and a remote relay is allowed for each detector simultaneously.

Specifications

The Model 'FDBZ'-series of air-duct housings are uniquely designed to use with the photoelectric detector. Sensitivity of Models PE-11, PE-11C and OP121 detectors can be verified for calibration via LED visual status or a Model RSAW-11, Model RSAC-11 or Model FDBZ492-RTL multi-color remote lamp. A **green** flash indicates the detector has passed its self test. **Amber** indicates a *Trouble* condition, and **red** indicates an *Alarm* event.

Sensitivity range for Models HFP-11, FP-11, SFP-11, HFPO-11, SFPO-11, FDO421, FDOOT441 and FDOOTC441 is verified from the multi-color LED of the respective detector, or its sensitivity reading may be printed by command from the corresponding FACP to an optional printer.

Model 'FDBZ'–Series of Air-Duct Housings and Detectors **6156**

Operation

Based on the monitoring results, the LED indicator flashes the following colors based on the following conditions:

Flash Color	Condition	Flash Interval (in seconds)
Green*	Normal supervisory operation. Smoke sensitivity is within rated limits.	10
Yellow:	Detector is in <i>Trouble</i> condition, and needs either repair or replacement.	4
Red:	<i>Alarm</i> condition.	1
No Flash:	Detector is not powered.	--

* LED can be turned OFF.

Please follow the corresponding description of the panel used.

Products included with the air-duct housing:

- (1) short-return (outlet) tube
- (1) stopper
- (2) #12 + 3/4" sheet-metal screws
- (1) mounting template

Note: Detector and sampling tube to be purchased separately. Minimum hardware required is: one (1) air-duct housing assembly; one (1) sampling tube and one (1) detector.

Details for Ordering

Model	Part Number	Description
FDBZ492	S54319-B22-A1	A two-wire addressable or conventional duct detector (without relays) designed for direct use on heating, ventilating and air-conditioning (HVAC) air-duct systems. When equipped, the air-duct detector housing will signal the presence of smoke being carried through the duct system. For use with the following Models: <ul style="list-style-type: none"> - HFP-11 - FDO421 - OP121 - SFP-11 - FDOOT441 - PE-11 - HFPO-11 - FDOOTC441 - PE-11C - SFPO-11 - FP-11
FDBZ492-HR	S54319-B23-A1	A two-wire addressable duct detector (with relays) designed for direct use to HVAC air-duct systems and works with the Remote Test Switch (FDBZ492-RTL). This part has a programmable relay base, and when equipped, the addressable air-duct detector housing will signal the presence of smoke being carried through the duct system. For use with the following Models: <ul style="list-style-type: none"> - FDO421 - FP-11 - SFP-11 - FDOOT441 - HFP-11 - SFPO-11 - FDOOTC441 - HFPO-11

Details for Ordering – (continued)

Model	Part Number	Description
FDBZ492-R	S54319-B24-A1	A two-wire conventional duct detector with relays designed for direct use on HVAC air-duct systems. This detector has a relay base, and when equipped with conventional air-duct housing, will signal the presence of smoke being carried through the duct system. For use with the following Models: <ul style="list-style-type: none"> - OP121 - PE-11 - PE-11C
FDBZ492-RP	S54319-B25-A1	A four-wire conventional duct detector with relays and a built-in power supply. Housing is designed for direct use to HVAC air-duct systems. It has a relay base with a built-in power source. When equipped with conventional air-duct housing, this duct detector will signal the presence of smoke being carried through the duct system. For use with the following Models: <ul style="list-style-type: none"> - OP121 - PE-11 - PE-11C
FDBZ492-RTL	S54319-S27-A1	Device is used for manual testing via a key-switch for duct-housing Models FDBZ492-R, FDBZ492-RP and FDBZ492-HR. Device mounts remotely from the conventional and addressable air-duct housing, allowing for manual relay-output control. The duct-detector remote key-switch also indicates the current state of the detector. For use with the following Models: <ul style="list-style-type: none"> - FDBZ492-R - FDBZ492-RP - FDBZ492-HR
FDBZ-WT	S54319-B26-A1	An optional, separate watertight NEMA 4X enclosure (Model FDBZ-WT) that provides added watertight protection for any of the Model FDBZ492-series duct housings. The duct housing fits into the separate 4X enclosure. This part allows the air-duct detector housing to be installed in the separate enclosure, and can be used in either an outdoor area or in environments where excessive moisture is prevalent. For use with the following Models: <ul style="list-style-type: none"> - FDBZ492 - FDBZ492-R - FDBZ492-HR - FDBZ492-RP
ST-10	500-649710	Sampling tube for Ducts 6" to 1'
ST-25	500-649711	Sampling tube for Ducts over 1' to 3'
ST-50	500-649712	Sampling tube for Ducts 3" to 5'
ST-100	500-649713	Sampling tube for Ducts 5' to 10'

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Notice: This marketing data sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.

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