


SIEMENS Air Duct Housings-Series 11

Fire Safety

ENGINEER AND ARCHITECT SPECIFICATIONS

- For Series 11 Detectors
- Relay Models Available
- Self contained Model available with "On - Board" Power Supply
- Alarm LED Visible from Front
- Clear Housing Cover for Quick Identification of Detector Type
-  Listed, ULC Listed
CSFM, FM, NYMEA Approved



Introduction

The Siemens Building Technologies, Fire Safety Division air duct detector housings are designed to be used with the PE-11 and FP-11 detectors. Designed for installation directly to heating, ventilating and air conditioning duct systems, they comply with National Fire Protection Association Standard No. 90A. When equipped with photoelectric detectors, these units will signal the presence of hazardous quantities of products of combustion or smoke being carried through the duct system. Air duct detectors are not intended to be substituted for open area detection.

Air duct housings can be equipped with optional relays. These relays are utilized to operate any supplementary equipment when smoke or particles of combustion are detected.

Note: Most control equipment guarantee only one detector per zone when the detector operated relay function is critical. The connection of a remote lamp and a remote relay per detector is allowed with PXL or System 3™ only, other conventional systems may use either a remote lamp or a relay.

With the MXL series of control panels, up to 60 detectors per circuit having relays may be used. The connection of a remote lamp or a remote relay is allowed for each detector but not both.

Air duct housings (see Ordering Information) are Underwriters Laboratories, Inc. listed.

Description

The Fire Safety air duct housing is uniquely designed to use the photoelectric detector.

Sensitivity of PE-11 detectors can be checked by viewing the LED or an RSAW-11 or RSAC-11 multicolor remote lamp. A green flash indicates the detector has passed its self test. Amber indicates a trouble condition, and red indicates an alarm state.

FP-11 sensitivity may be viewed from the multicolor LED on the detector or preferably may be printed by command on an optional printer from the MXL control panel.

The detector unit employs a cross-sectional sampling principle of operation. Inlet sampling tubes are available in four lengths (see table on reverse side). Outlet sampling tubes are one common length. A continuous cross-sectional sample of air moving through the duct is taken. This averages the effects of laminar flow, stratification or skin effect phenomena occurring in the duct that could prevent combustion product or smoke (especially in large ducts) from reaching a spot type detector.

In addition, the unique design of the sampling chamber insures uniform sensitivity in air velocities, ranging from a low of 300 feet per minute to as high as 4000 feet per minute.

CATALOG NUMBER **6178**

Replaces Catalog Sheet Number 6177



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The inlet sampling tube length is determined by the width of the air duct being protected. The inlet tube nearest to but greater than the duct width should be used (see table). The inlet tube can then be trimmed at the job site to the exact width of the duct. The outlet sampling tube for all ducts, irrespective of width, has a fixed length of approximately 3 inches (7.5 cm) and is supplied with the duct housing.

Duct Width	Sampling Tube Model No.
9" to 1'9" (21 cm to 51 cm)	STA-2
1'9" to 3'3" (51 cm to 97.5 cm)	STA-3
3'3" to 6'3" (95.5 cm to 187.5 cm)	STA-6
6'3" to 9'9" (187.5 cm to 292.5 cm)	STA-10
Greater than 9'9" (292.5 cm)	Consult Siemens Fire Safety

When the use of a remote relay is required, order model AD-11PR for conventional systems; AD-11XPR for MXL systems. When required the EAD-3 weatherproof enclosure for Duct Housing is available.

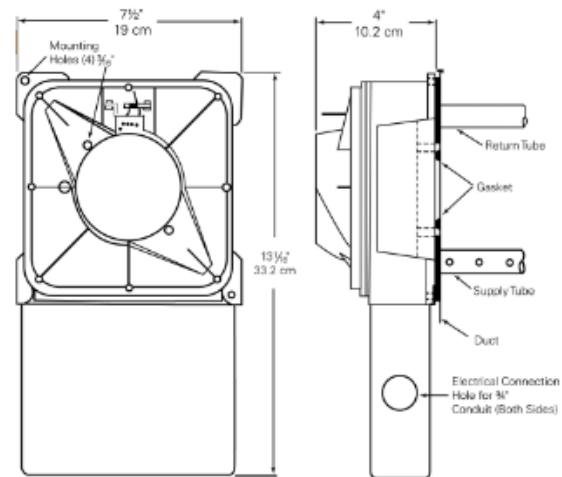
Sampling Tube Selection Table

Maintenance of the detector is easily accomplished by the removal of the Series 11 duct housing sampling chamber cover. The detector, which plugs into the housing, is easily removed for cleaning by a trained technician.

All that is necessary for the installation of the air duct detector is the cutting of three small holes for the sampling tube installation (template included) and the drilling of four holes for mounting the air duct housing. The unit is then easily mounted in place and connection made to the existing wires or terminals if optional accessories are utilized.

When using the PE-11 or FP-11 detector in an AD-3I or AD-3ILP duct detector housing you must use the AD-11UK upgrade kit consisting of a detector base adapter and a new duct housing cover. Any Series 3 accessories such as remote lamps or relays will also have to be updated to PE-11 accessories. The FP-11 is

electrically compatible with Series 3 MXL accessories.



Model	Description	Shipping Weight	
		Lb.	Kg.
AD-11P	Series 11 air duct housing with cover for the PE-11 and FP-11 detectors	5	2.25
AD-11PR	Series 11 air duct housing with cover for the PE-11 photoelectric detector and equipped with remote relay	5	2.25
AD-11XPR	Series 11 air duct housing with cover for the FP-11 detector equipped with remote relay	5	2.25
SA-11P	Series 11 air duct housing with power supply for self-contained unit operation for Pe-11 photoelectric detector	7	3.15
AD-11UK	Upgrade kit for using PE-11 or FP-11 detector in a series 3 duct housing	1	.45
STA-2	Sampling Tube, for ducts 9" to 1'9"	1	.45
STA-3	Sampling Tube, for ducts 1'9" to 3'3"	2	.9
STA-6	Sampling Tube, for ducts 3'3" to 6'3"	4	1.8
STA-10	Sampling Tube, for ducts 6'3" to 9'9". Sampling Tubes greater than 9'9", consult Siemens Fire Safety	6	3.7
RLC-11	Remote Alarm Lamp, ceiling mounted for PE-11	.5	.22
RLW-11	Remote Alarm Lamp, wall mounted for PE-11	.5	.22
RSAC-11	Remote Tri-color LED, ceiling mounted for PE-11	.5	.22
RSAW-11	Remote Tri-color LED, wall mounted for PE-11	.5	.22
PE-11	Conventional Photoelectric Detector	1	.45
FP-11	Intelligent FirePrint™ Detector	1	.45
EAD-3	Weatherproof enclosure for Duct Housing	5.5	2.5

Model	Description	Part Number
RLI-1	Remote (red) alarm indicator - 4" octagon box mount	500-390673
RLI-2	Remote (red) alarm indicator - single gang box mount	500-390674

Note: Minimum hardware required is one Air Duct Housing Assembly, one Sampling Tube and one Detector.

NOTICE: The use of other than Fire Safety detectors and bases with Fire Safety equipment will be considered a misapplication of Fire Safety equipment and as such voids all warranties either expressed or implied in regard to loss, damage, liabilities and/or service problems.



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