



Cerberus® AlgoRex

Air sampling smoke detection unit DBZ1197A

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- **Reliable monitoring of fresh air, used air and air re-circulation ducts for smoke in air conditioning and ventilation systems**
 - **Suitable for air speeds of 1m/s to 20m/s**
 - **Smoke detection with the DS11 smoke detector**
 - **For collective, AnalogPLUS and interactive fire detection systems**
 - **Adaptable detection algorithms in interactive fire detection systems**
 - **Simple installation with only one air flow tube**
 - **Accessories for all shapes of duct**

Operation

The air sampling smoke detection unit is a passive monitoring system without its own fan. It utilizes the differences in pressure in the ventilation system in order to carry continuous air samples via the air flow tube (bypass) from the ventilation duct to the air duct sampling chamber.

The air sampling smoke detection unit operates reliably as long as the ventilation system is in operation and air can circulate. Normally, the air to be monitored must be clean, i.e. free of dust and aerosols.

When the built-in smoke detector registers a certain smoke concentration the corresponding danger level is signalled to the control unit, which in turn activates the required alarm. The response indicator in the smoke detector visually signals the danger.

Normally the standard smoke detectors DO11x1A or DO11x2A are used at the highest level of sensitivity. However, if the air is clean the highly sensitive DO11x3A smoke detector is also permissible

Design

The air sampling smoke detection unit consists of:

- the DBZ1197A air duct sampling chamber with:
 - the grey plastic housing with transparent cover
 - the air flow chamber with special air conveyance device
 - the mechanical air flow indicator
 - the connection chamber with 10 terminals
- the corresponding DBZ1197-Ax air flow tube with combined air inlet and air outlet
- the corresponding DO11xxA AlgoRex smoke detector with DB11xxA base

Options:

- DBZ1197-AE mounting device for uneven, round and insulated ducts
- air flow tubes 1500mm and 2800mm long
- DBZ1197-AD rubber gasket when using the mounting device and the longer tubes

Installation

The air duct sampling chamber is mounted on the outside of the air duct. Only the air flow tube is introduced through a hole drilled into the duct and shortened according to the diameter of the duct.

Normally, the air duct sampling chamber is mounted on the air duct using three metal screws. It can also be mounted without difficulty on uneven, round or insulated ducts using the mounting device.

Three knockouts are provided both at the top and rear for cable entry.

Choice of location

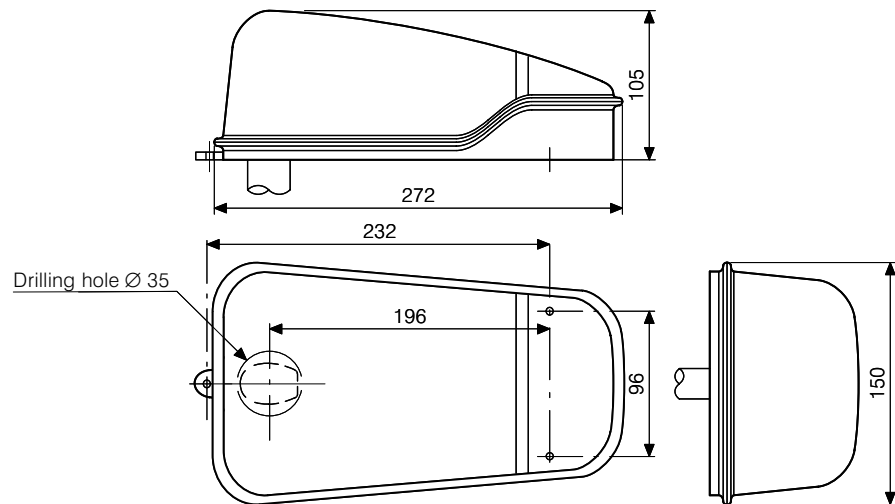
The air duct sampling chamber is mounted in the ventilation system where air flow measuring devices are usually installed, i.e. where there is no air vortex, change of direction, duct branching, duct narrowing or duct extensions.

In order to guarantee smoke detection, mount the air duct sampling chamber after the last air inlet point.

Technical data

Housing of the air duct sampling chamber	
- material	ABS
- cable entry	2x3, Ø19mm
- EN60529 / IEC529 protection category	IP64
- colour	grey ≈ RAL7001
Smoke detector / base	DO11xxA / DB11xxA
Air flow tube	Aluminium
Minimum duct diameter	100mm
Permissible air speeds	1...20m/s
Air flow indicator	≥1m/s
Ambient temperature	-20...+50°C
Humidity	max. 95% r.h.
Approvals	
- VdS with smoke detector DO1104A	no. G 201059

Dimensions



Details for ordering

	Type	Part no	Designation	Weight
Air sampling smoke detection unit	DBZ1197A	492650	Air duct sampling chamber	0.645kg
	DBZ1197-AA	492663	Air flow tube 600mm	0.225kg
			Smoke detector and base (interactive, AnalogPLUS, collective) see detector documents	
Accessories	DBZ1197-AB	499501	Air flow tube 1500mm	0.565kg
	DBZ1197-AC	499514	Air flow tube 2800mm	1.050kg
	DBZ1197-AD	499527	Rubber gasket, required for DBZ1197-AB/AC/AE	0.040kg
	DBZ1197-AE	499530	Mounting device	0.580kg
	DBZ1197-AF	529484	Spare cover	-

