



PRESS-RELEASE

Sensing Smoke directly in the Duct

A Duct Smoke Detector called TDD (True Duct Smoke Detector) from Automatikprodukter, Sweden is able to detect smoke at a very early stage in the rough environment of a ventilation duct without giving false alarms.

TDD is an optical obscuration designed to function inside the ventilation duct.

The sensing part of the detector covers as much as possible of the duct.

An infrared beam is transmitting through the sensing tube in the duct and if smoke present the beam is obscured to some extent and an alarm signal is given.

The TDD-detector has an adjustable level of sensitivity that goes from 3 to 25% (0,1 to 0,9db) obscurity for all different environments that can exist in a duct.

You may ask, how does the TDD cope with dust?

It surely must affect this detector as well.

Dust is always present in the return air duct as is air velocity.

The air will inevitably bring dust and this will stick to the detector optical parts, however, the electronics constantly monitor the obscuration within the sensing tube.

The air brings along dust and particles that of course also catches of the TDD-detector.

Despite it manage to be dirty without making a false alarm and without loosing its sensitivity and as the level changes slowly over a long period of time (weeks or Months).

The signal is adjusted to compensate for this build of dust, however, should the obscuration change rapidly (Seconds) this is signalled as smoke and will cause an alarm after an initial delay to compensate for drops of water or dust that disturbed from duct wall etc.



Automatikprodukter

The internal calibration of the detector is provided at an outgoing terminal in order that the level may be seen if connected, for example, to a BMS-system.

This signal is 2 to 10 volt with 3 volt being clean 10volt dirty or in alarm and 7 volt being service indication .

Normal maintenance staff without previous training can clean TDD.

If they clean a pair of glasses they can clean the TDD it is the same technique.

This provides a better economic solution for the low life cost (LCC) for the end user

TDD is constructed to be connected to all in market existing Fire Alarm- and BMS-system, both digital and analogue.

As standard there is two alarm output with an open switch for smoke alarm and one analogue 2-10V for an output service alarm.

Picture text: TDD Duct Smoke Detector

Contact: Ewert Johansson, ewert@automatikprodukter.se +46708-885298
www.automatikprodukter.se

Automatikprodukter i Askim
Gåsmossen 43
SE-436 39 ASKIM
Sweden

Tfn: +46-(0)31-28 72 02
Fax: +46-(0)31-68 34 36

Styrelsens säte: Göteborg