

Differences between Smoke Detection Systems SDS-2/6 and SDS-48

The Smoke Detection System SDS has been produced between 1995 and 2001. More than 1000 systems of this type have been installed world-wide.

The SDS-48 system is the successor of the SDS-2/6 system. The main target for this development was the reduction of required installation space. The simplicity of installation and operation however should be maintained.

On the first glance both systems are difficult to distinguish. Both systems use the same enclosures, which are combined in modular manner to fit different system sizes and they use the same operation interface. The main difference are the smaller smoke detectors in the SDS-48 system which allow more detection lines in an enclosure. Furthermore the extension panels of the SDS-48 system do not require separate enclosures for "Detector Interface Modules" as the SDS-2/6 system does. These measures reduce the required installation space up to 50%.

For the service engineer it is helpful to know, that unfortunately the old SDS-2/6 system had not been labeled as "SDS-2/6" but simply as "SDS".

Some more differences in detail:

Compared Item	System SDS-2/6	System SDS-48
Maximum number of detection lines	36	48
Connection method between main panel and extension panels	RS-485 bus. If more than 1 extension panel must be connected, they must be connected to the smoke detection panel in form of a "line".	Smoke detector bus. If more than 1 extension panel must be connected, they must be connected with the smoke detection panel in form of a "star".
Configuration of the smoke detector identification number	The identification no. will be asserted by DIP-switches on the rear side of the smoke detector. <i>The identification no. must correspond to the actual line no. as described in the manual ! Keep this in mind, when you exchange smoke detectors to a different position for test purpose !</i>	The identification no. will be asserted by "XPERT"-cards in the base of the smoke detector. <i>As long as the detector base will not be exchanged (very seldom), a newly inserted smoke detector will automatically assert the correct line no !</i>

Compared Item	System SDS-2/6	System SDS-48
Position of type labels at smoke detection panel, extension panel and repeater panel	At the right outside of the enclosures, in the lower right corner.	Inside the enclosure (lower door) in the middle of the lower side.
Smoke Detector Type	BHH-31A/Ex	XP95 I.S.
Pressure Switch for Airflow Detection	604	604
Safety Barrier for intrinsically safe operation	Zener Barrier Type Z 967	Galvanic Isolator KFD0-CS-Ex1.54 (1 channel) KFD0-CS-Ex2.54 (2 channel)
Panel Types	SDS-2 (panel, max. 2 lines) SDS-6 (panel, max. 6 lines) SDS-E2 (extens., max. 2 lines) SDS-E6 (extens., max. 6 lines) SDS-R (repeater panel) SDS-0420 (fan unit) SDS-0430 (fan unit)	SDS-4 (panel, max. 4 lines) SDS-8 (panel, max. 8 lines) SDS-12 (panel, max. 12 lines) SDS-E8 (extens., max. 8 lines) SDS-E12 (exten., max. 12 lines) SDS-E16 (exten., max. 16 lines) SDS-R48 (repeater panel) SDS-0440 (fan unit)
“ACCEPT” of alarm and fault messages (Sounder off)	possible from each display for all panels	Only possible at local panel except from repeater panel on bridge
Electronic Modules	cannot be exchanged between SDS-2/6 and SDS-48 (exception: pressure switch for airflow indication)	