

## SSD 515-xS - Special Smoke Detector for REK 511

### Description

Sector:	FAS
Participant on:	Full addressing for ASD / RAS
Purpose:	Scattered light smoke detector
Applicability:	CEA, EN 54 and CE, global
Component of:	REK 511

The SSD 515-xS (**S**cattered **L**ight **S**moke **D**etector) is the smoke sensor for the accessory device REK 511 (full addressing) for the Aspirating Smoke Detector of the ASD and RAS product family. The SSD 515-xS operates according to the scattered light principle and is designed so that it optimally meets the specific requirements of smoke detection in association with an Aspirating Smoke Detector. The detector has alarm threshold tracking and is additionally available with various sensitivities. By choosing the appropriate detector sensitivity, application-specific detection properties of the Aspirating Smoke Detector is possible.

The SSD 515-xS is available in four sensitivities. See Technical data.



Fig. 1 SSD 515-xS

### Applications

#### Danger information



- The SSD 515-xS may be used only as a detection element in the REK 511. The choice of sensitivity depends on the detection requirements and the ASD planning.
- The **SSD 515-0S** may be used only in applications with extremely high dust content (no VdS / CEA approval).

### Technical data

Principle of operation	Scattered light (Tyndall effect)		
Area to be monitored, installation height	Dependent on the ASD planning		
Permissible air speed	(According to ASD conditions) max. 20 m/s		
Sensitivity of smoke detector acc. to EN 54-7 / CEA	SSD 515-0S "black"	Insensitive	1.8 %/m
	SSD 515-1S	Standard	1.2 %/m
	SSD 515-2S „yellow“	Sensitive	0.6 %/m
	SSD 515-3S „red“	High sensitive	0.3 %/m
Operating voltage range	18 to 28 V-DC		
Current consumption in total operating voltage range	normal	typically 14, max. 16	mA
	at alarm	typically 16, max. 29	mA
	at fault	typically 20, max. 22	mA
Signal transmission to FACP	terminal 3: alarm; terminal 4: fault, via MRP 915 in the REK 511		
Protection category in conjunction with base	IP 44		
Testing by VdS, <b>only SSD 515-1S, SSD 515-2S, SSD 515-3S</b>	VdS and CEA		
Ambient temperature range, installed in REK 511 (continuous)	-20 - +60 °C		
Ambient humidity, installed in REK 511 at 40 °C	briefly, without condensation	95	% rel/F
	continuous, without condensation	70	% rel/F
Dimensions without base	Ø 80 / height 56 mm		
Housing colour	Electric white		
Housing material	PC		
Weight	74 g		

## SSD 515-xS - Special Smoke Detector for REK 511

### Response behaviour

Materials	Smouldering fire	Open fire	
		with smoke	without smoke
organic and inorganic	++	+	--

++ very suitable, + suitable, - unsuitable



#### Information

Fire detectors may cause false alarms owing to operational disturbances, such as smoke, vapour and dust.

### Design



#### Information

The country-specific guidelines for planning and installation of automatic fire alarm systems are applicable for design. Additional guidelines may apply to Aspirating Smoke Detectors.

In particular, the manufacturer's instructions in the product-specific design guidelines are a part of the respective approval procedure and must be taken into account when designing the systems..

### Assembly / Installation

The use, assembly and installation of the SSD 515-xS are implemented according to the Data Sheet REK 511 T 130 422E.

### Connection

The electrical connection is via the integrated relay print of the REK 511, MRP 915 (in detector base).



#### Danger information

The SSD 515-xS cannot be connected directly to an Aspirating Smoke Detector. The connection is made directly from the FACP, see Fig. 2.

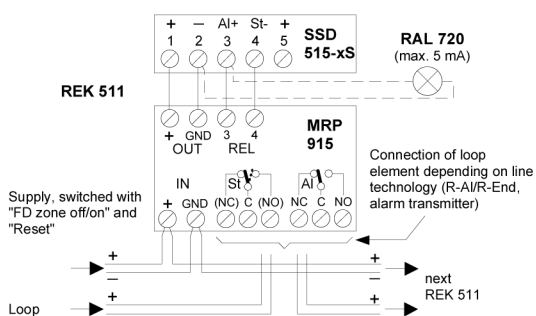


Fig. 2 Connection

### Article numbers and spare parts

Type / Article / Component		Art. No. HEKATRON	Art. No. SECURITON
SSD 515-0S, 1.8 %/m	Mark "black"	5000604.0300	022.236 179
SSD 515-1S, 1.2 %/m		5000604.0X01	022.233 765
SSD 515-2S, 0.6 %/m	Mark "yellow"	5000604.0X02	022.233 773
SSD 515-3S, 0.3 %/m	Mark "red"	5000604.0X03	022.233 781
Spare SSD 515-0S (detector during maintenance)	Mark "black"	95000604.0300	022.613 541
Spare SSD 515-1S (detector during maintenance)		95000604.0X01	022.612 260
Spare SSD 515-2S (detector during maintenance)	Mark "yellow"	95000604.0X02	022.612 278
Spare SSD 515-3S (detector during maintenance)	Mark "red"	95000604.0X03	022.612 286

X = Customer variants: 1 = Securiton CH, 2 = Hekatron, 3 = Securiton D, 4 = Securiton Export, 5 = Schrack

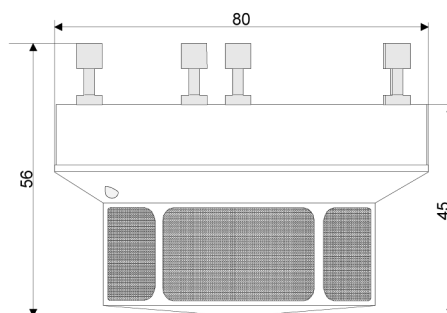


Fig. 3 Dimensioned drawing SSD 515-xS

### Further Documents

Data Sheet REK 511

T 135 422E

### Testing



#### Information

The SSD 515-xS may be tested using only SE-CURITON/ HEKATRON testers.

### Displays

The LED of the SSD 515-xS indicates the following statuses:

#### Status

- Normal mode
- Dusty
- Dirty
- Fault
- Alarm

#### LED

- steady green
- green, with pulsating yellow
- flashing green/yellow
- steady yellow
- steady red

### Maintenance



#### Information

The manufacturers of fire detectors recommend: Fire detectors should be subjected to maintenance (according to VDE 0833 Part 1 and VKF), taking into account the particular ambient operating conditions. The fire detectors must undergo maintenance at the factory after an operating time of 8 years. Earlier maintenance at the factory may be required as a result of particular ambient operating conditions, and this applies in particular to fire detectors of Aspiration Smoke Detectors.