

Description

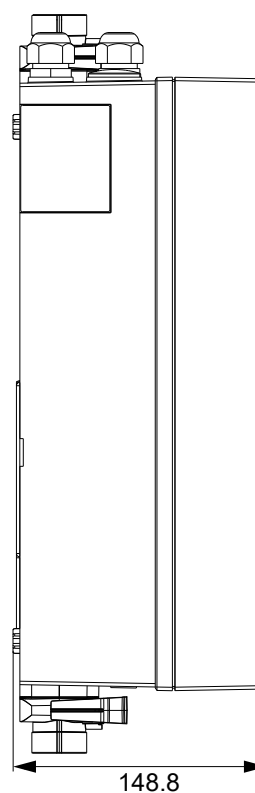
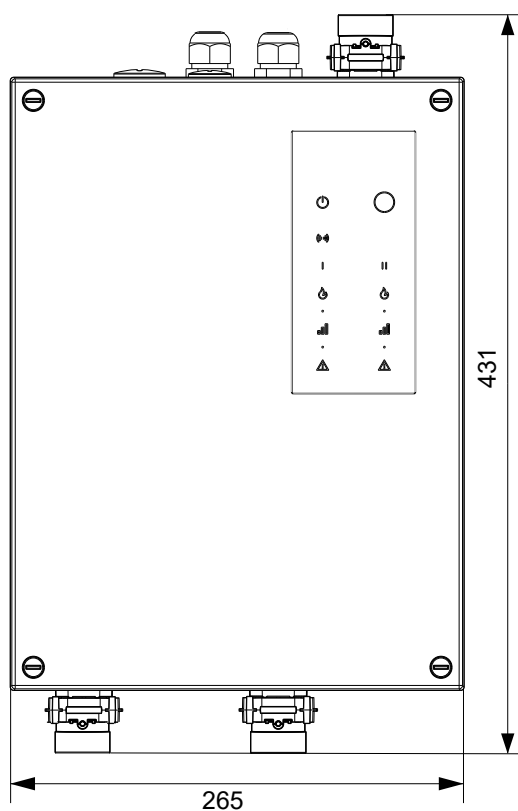
The ASD is an aspirating smoke detector with highly sensitive smoke sensors; it samples and checks ambient air via a sampling pipe tube network. Airflow monitoring ensures that the sampled air flows to the smoke sensors in the correct amount and at the correct speed.

If the concentration of smoke particles exceeds an adjustable threshold value, the ASD triggers an alarm. In addition, a second alarm and 3 pre-signals can be configured. The ASD forwards the signals via relays to other fire alarm control panels.

Standards-compliant planning and project management is carried out with the PC application PipeFlow. The parameters calculated in this way are transferred to the ASD during commissioning using the MobileConfig mobile application. MobileConfig offers other functions for control and maintenance of the ASD as well as for reading out current events and live values.



Dimensions in mm (ASD 2002)



Product implementations

The ASD is available in the following versions:

Type	Number of channels	Number of airflow sensors	Number of smoke sensors
ASD 2001	1	1	1
ASD 2002	2	2	2
ASD 2004	4	4	2

System limits

	Class A	Class B	Class C
ASD 2001			
Maximum overall length of the sampling pipe tube network per ASD (m)	400		
Maximum overall length of the sampling pipe tube network per channel (m)	400		
Maximum overall length from the detector housing to the farthest sampling hole (m)	90	110	150
Maximum number of sampling holes per ASD	31	80	120
ASD 2002			
Maximum overall length of the sampling pipe tube network per ASD (m)	700		
Maximum overall length of the sampling pipe tube network per channel (m)	400		
Maximum overall length from the detector housing to the farthest sampling hole per channel (m)	80	100	115
Maximum number of sampling holes per ASD	62	160	240
Maximum number of sampling holes per channel	31	80	120
ASD 2004			
Maximum overall length of the sampling pipe tube network per ASD (m)	700		
Maximum overall length of the sampling pipe tube network per smoke sensor (m)	400		
Maximum overall length from the detector housing to the farthest sampling hole per channel (m)	70	90	90
Maximum number of sampling holes per ASD	62	160	240
Maximum number of sampling holes per channel	15-16	40	60

Technical data

Supply voltage range		14 to 30	VDC
		UL: 16.4 to 27	
Nominal voltage		24	
Maximum power consumption at 24 VDC, measured at maximum fan speed (not under load):			
ASD 2001	Normal state	412	mA
	Alarm simultaneously on SSD I, SSD II	425	
ASD 2002	Normal state	447	
	Alarm simultaneously on SSD I, SSD II	468	
ASD 2004	Normal state	467	
	Alarm simultaneously on SSD I, SSD II	490	
Switch-on current peak at 24 VDC		500	mA
		for a maximum of 10	ms
Sampling pipe length	Complies with general system limits according to EN 54-20		
Sampling pipe diameter, typical (inner/outer)		20/25	mm
Maximum number of sampling holes	Complies with general system limits according to EN 54-20		
Sampling hole diameter	Ø 2 / 2.5 / 3 / 3.5 / 4 / 4.5 / 5 / 5.5 / 6 / 6.5 / 7		mm
Response range, smoke sensor sensitivity	EN 54-20, Class A, B, C		
Protection type according to IEC 60529 / EN 60529		IP 54	
Operating temperature range		-20 to +60	°C
		UL: max. +40	
Maximum permissible temperature fluctuation of detector housing and sampling pipe in operation (condensation not permitted)	Sensitivity range 0.01 to 0.5%/m	Sensitivity range ≥ 0.5%/m	
	60	80	K
Maximum permissible storage temperature of the detector housing without condensation		-30 to +70	°C
Ambient pressure difference between detector housing and sampling pipe (sampling holes)		Must be identical	
Ambient condition humidity detector housing, briefly without condensation		95	% rel. humidity
Ambient condition humidity detector housing sampling pipe continuous		70	
Maximum load capacity relay contact		50 (UL: maximum 30)	VDC
		1	A

		30	W
Maximum load capacity of the open collector output (dielectric strength 30 VDC)		100	mA
Terminal cross-section power supply		2.5	mm ²
Connection terminal cross-section inputs, outputs		1.5	
Cable screw unions for cable diameters	Ø 5 to 12 (M20) / Ø 9 to 18 (M25)		mm
Sound pressure level compliant with ISO 3744 at fan speed	7,000	20,000	RPM
	21	40	dB (A)
Housing	Material	PC ABS	
	Flammability class UL	94-V0	
	Colour compliant with NCS	S 8005 R80B (anthracite)	
Approvals		EN 54-20	
VdS certification		G 225014	
Dimensions		265×431×148.8	mm
Weight ASD 2001 (with SSD)		3,415	g
Weight ASD 2002 (with SSD)		3,981	
Weight ASD 2004 (with SSD)		4,120	
Weight SSD 10x0		388	