

CONTROL UNIT FOR LINEAR DETECTOR AECL-ADW1; AECL-ADW2

Description

The integrated SecuriSens ADW 535 line-type heat detector combines a proven functional principle with the latest developments in sensor and processor technology.

A sensing tube filled with normal air is installed in the area to be monitored. A fully electronic pressure sensor permanently records the pressure in the sensing tube. This is monitored constantly in the processing electronics and compared with the alarm criteria. Diverse setting options are offered directly on the device via EasyConfig or using the comfortable ADW Config tool for perfect adaptation to existing environmental conditions. The Dynamic Heat Watch (DHW) technology ensures that a brief temperature increase caused by the ambient conditions does not result in a false alarm.

- Integrated line-type heat detector for 1 or 2 sensing tubes (Double Tube Technology)
- Based on proven technology
- Fastest heat detector with fully programmable response behaviour plus differential and maximal evaluation
- Intelligent alarm verification with DHW technology (Dynamic Heat Watch)
- Available as standard and Heavy Duty version (with Atex approval)
- Sensing tubes of copper, stainless steel or Teflon withstand extremely severe ambient conditions and high temperatures; can be installed in Ex areas
- High level of functional dependability thanks to fully automatic sensing tube monitoring
- High-performance software: ADW HeatCalc for planning, ADW Config for configuration and maintenance
- EN 54-22 and UL/FM approved

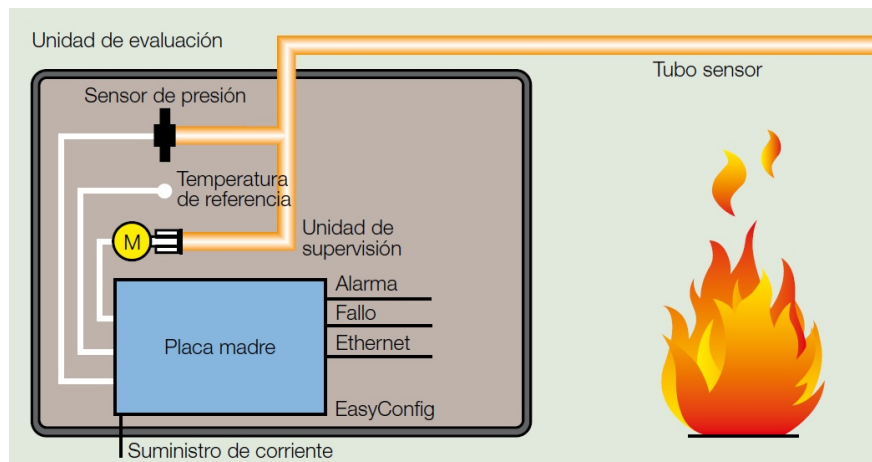


Applications

Thanks to the extremely tough sensing tube, the SecuriSens ADW 535 can be deployed in many applications where conventional fire detectors do not work. With its long service life and maintenance-free design, the ADW 535 is also ideal in applications where detection properties must remain constant over the entire product service life.

Typical applications:

- Tunnels: road tunnels, metro and railway tunnels, utility and cable tunnels
- Underground garages, vehicle silos
- Food industry, industrial kitchens, large commercial bakeries
- Alcohol processing, distilleries
- Chemical industry, refineries, oil tanks
- Waste incineration plants
- Outdoor applications: loading platforms (flying roofs), historical bridges, fuel warehouses, towers
- High-temperature applications such as: paint shops, steel plants, kilns, climate chambers, gas turbines, engine test benches
- And many other applications, e. g. underfloor monitoring in rolling stock, marine applications



Sensing tubes:

Depending on the application, various sensing tubes are used (all of which have VdS approval):

- Copper: standard applications, property surveillance
- Stainless steel: food industry and high temperature applications
- PTFE (Teflon): aggressive ambient conditions (e.g. chemical industry)

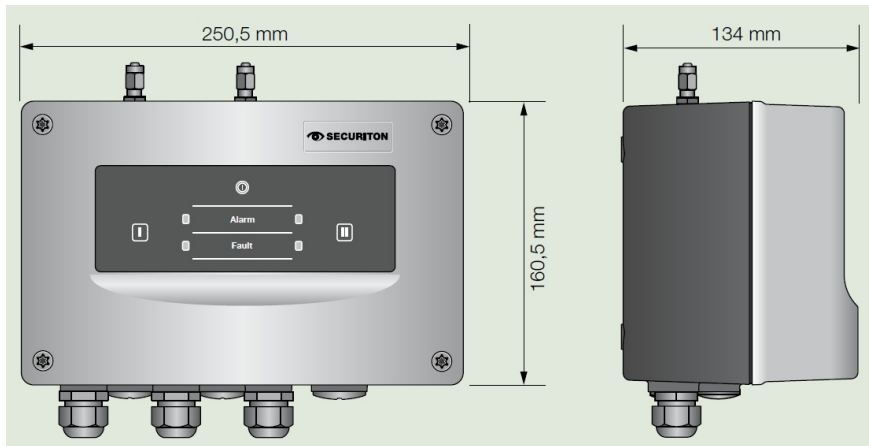
ADW HeatCalc

ADW HeatCalc is used for sketching the sensing tube system and calculating the necessary system settings. The PC tool is rounded off by the parts list and report for the plant documentation.

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AECL-ADW1; AECL-ADW2

Dimensions



TECHNICAL CHARACTERISTICS			
		AECL-ADW1	AECL-ADW2
Supply voltage range		EN 54/FM/UL 9.0 – 30 V DC/10.5 – 29 V DC	EN 54/FM/UL 9.0 – 30 V DC/10.5 – 29 V DC
Power consumption (24 V DC)	Normal operation	35 mA	43 mA
	Self-test	210 mA (for approx. 180 sec)	230 mA (for approx. 180 sec)
Sensing tubes		1	2
Sensing tube length with/without EN 54-22		máx. 115 m/200 m	máx. 2 × 115 m/2 × 200 m
Sensing tube monitoring		Automatic self-test monitors sensing tube for leaks, pipe breakage and crushings	
Interfaces	Relay/o. C.	2 (Alarm, Fault)	4 (Alarm I & II/Fault I & II)
	Network/PC tool	Ethernet	Ethernet
	Inputs	Reset, day/night, reference	Reset, day/night, reference
Relay contacts		50 V DC/1 A (UL 30 V DC)	50 V DC/1 A (UL 30 V DC)
Optional modules Máx. 4		1 o 2 RIM 36, 1 SIM 35, 1 XLM 35	1 o 2 RIM 36, 1 SIM 35, 1 XLM 35
Standards EN 5422/FM 3210/UL 521		Classes A1I, A2I, BI, CI, DI, EI, FI, GI	Classes A1I, A2I, BI, CI, DI, EI, FI, GI
Approvals (applied for)	All versions	VdS, CE/DoP, UL, FM	VdS, CE/DoP, UL, FM
	HDx only	Atex	Atex
Housing 1 and 2:			
Dimensions		250.5 × 160.5 × 134 mm (W × H × D)	250.5 × 160.5 × 134 mm (W × H × D)
Colour		Light grey RAL 280 70 05, Charcoal RAL 300 20 05	Light grey RAL 280 70 05, Charcoal RAL 300 20 05
Material, weight		ABS-Blend, UL 94-V0, approx. 1600 g	ABS-Blend, UL 94-V0, approx. 2000 g
Packaging		262 × 238 × 170 mm (W × H × D)	262 × 238 × 170 mm (W × H × D)
Protection type EN 60529		IP 65	IP 65
Housing 1HDx y 2HDx:			
Dimensions		260 × 160 × 134 mm (W × H × D)	260 × 160 × 134 mm (W × H × D)
Colour:		Graphite black RAL 9011	Graphite black RAL 9011
Material, weight		Duroplast, approx. 2100 g	Duroplast, approx. 2500 g
Packaging		272 × 238 × 170 mm (W × H × D)	272 × 238 × 170 mm (W × H × D)
Protection type EN 60529		IP 66	IP 66
Display and operation LED		1 (green) operation, 1 (red) alarm, 1 (yellow) fault	1 (green) operation, 2 (red) alarm, 2 (yellow) fault
Event memory Recording		> 16 m. events (installed SD card)	> 16 m. events (installed SD card)
For analogue values		Up to 1 year (installed SD card)	Up to 1 year (installed SD card)