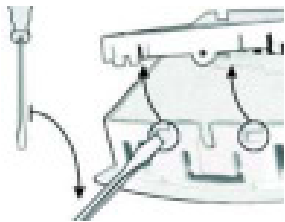SAS/SP/FS/MS

SAS

Features

_ **Wide range of sensing element types**

_ **Blends into the fabric of any building**

_ **Aesthetically pleasing housing**

_ **Uniformity of sensors with other AP products**

_ **Housing designed to maximize air flow throuh it, giving fast response times**

_ **Switch and setpoint options**

Accuracy		
NTC	±0,2°C	0...70°C
PT 100a	±0,2°C	@25°C
PT 1000a	±0,2°C	@25°C
NI 1000a	±0,4°C	@0°C

Technical Data

Connection	2-wire screened cable screw terminals 0,5 to 2,5mm^2
Ambient range	-10…+60°C
Housing	IP30, ABS flame retardant
Dimensions	115 x 85 x 28 mm

Technical Overview

The SAS-range of wall mounting temperature sensors can be fitted with either a high quality thermistor, Nickel or Platinum PTC sensing elements.

This flexibility ensures compatibility with vast majority of controllers.

Interface restrictions

- **SP**   Only

- **MS**   Only

- **SP-MS**   Only

- **SP-FSx**   Only

Ordering Codes

SAS NTC	Cylon, Trend, Honeywell (Aquatrol), Thorn, Elesta, Siox, Seachange, Distech
SAS HON	Honeywell, 20K@25C
SAS JOH	Johnson Control
SAS PT100	Serck, Satt, Siox, ABB
SAS PT1000	Cylon, Johnson Honeywell, Serck
SAS TA	TAC
SAS NI1000	Sauter
SAS LGNI	Siemens Landis & Staefa QAA 23, QAD 21.
SAS ALE	Alerton, Satchwell DDU 1804, Honeywell TE 200AD-6
SAS AND	Andover, York <40°C, Siebe TS serie
SAS SAT1	Satchwell DDT
SAS SAT2	Satchwell DD some
SAS SAT3	Satchwell, see resistance schedule
SAS ST30	Staefa T30
SAS ST1	Staefa T1
/FS3	3-speed fan switch resistive
/FS4	4-speed fan switch resistive
/FS5	5-speed fan switch resistive
/MS	Momentary switch N/O push button
/SP	0-10kohm or 11-1kohm resistive setpoint

Installation

1. Select a location on a wall of the controlled space which will give a representative sample of the prevailing room condition

   Avoid sitting the sensor in direct unlight, on an outside wall or near heat sources.

2. Undo the tamperproof screw at the bottom of the housing.

3. To remove the front panel from the base, twist a screw as below and pull gently the front panel from the base

4. Using the base as a template mark the hole centres and fix to the wall suitable screws.

   Alternatively the base plate can be mounted on to a conduit box or standard recessed back box

5. Feed cable through the hole in the base plate of the housing and terminate the cores at the terminal block as required.

   Leaving some slack inside the unit.

6. Replace the housing to the base plate.

Connections

All connections to BEMS controllers, data recorders etc. should be made using screened cable.

Normally, the screen should be earthed at one end only (usually the controller end) to avoid earth hum loops which can create noise.

Low voltage signal and supply cables should be routed separately from high voltage or mains cabling.

Separate conduit or cable trays should be used.

Where possible, the controller's earth should be connected to a FUNCTIONAL EARTH, rather than the mains safety earth.

This will provide better immunity to high frequency noise.

Most modern buildings have a separate earth for this purpose.

Whilst every effort has been made to ensure the accuracy of specfication Automatikprodukter cannot accept responsibility for damage, injuryloss or expenses from error or commission.
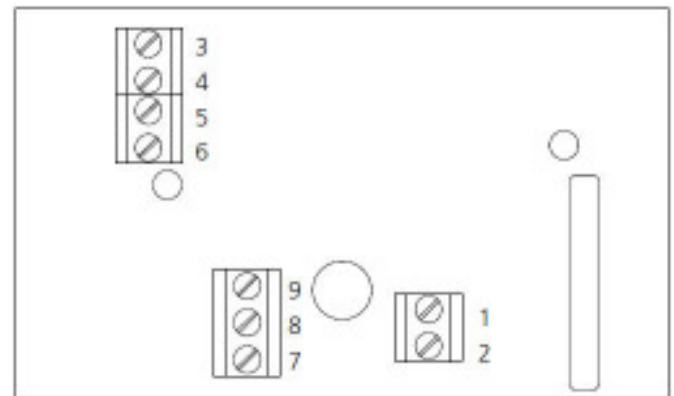In interest of technical improvements this specification may be altered without notice.

Connections

Temperature only

Terminal block

Temperature and Options

All thermistor/RTD elements and options are polarity indepedent.

1 & 2 Temperature	3 & 4 Fan speed, resisitve
5 & 6 Momentary switch	7 & 8 Set point, 0-10kohm

8 & 9 Set point resisitive 11-1kohm

Options

Set point, this is available in two standard values;

-	+
0kohm	10kohm
11kohm	1kohm

Using an external lkohm resistor (not supplied) on the 0-10k terminals 1-11kohm can be achieved if required.

Potentiometer tolerances are +/-30%

Fan speed, the position of the selector switch will cause the resistance between the terminals to alter as shown below;

Switch position	Output
0	Öpen circuit
1	22,7kohm
2	26kohm
3	29,3kohm
Auto	32,6kohm

Momentary switch, rated at 24Vac/dc@500mA max.