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Features & Benefits

- Wide range of sensing element types
- Base plate compatible for both EU & North America fixings
- Housing designed to maximize air flow through it, giving fast response times

Technical Overview

The TT-1000 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 a vast majority of controllers.

The TT-1000 can be configured with a variety of user interface options including, set point control, fan speed switching (resistive) and momentary switches. The base plate allows for both EU and North American fixings.

Product Codes

TT-1000 Space Sensor

Sensing Element (add type to above code)

-A (10K3A1) Trend,	Cylon,	Distech
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- -B (10K4A1) Andover
- -C (20K6A1) Honeywell
- **-D** (PT100a) Serck
- **-E** (PT1000a) Cylon
- -F (NI1000a) Sauter
- -G (Ni1000a/TCR(LAN1)) Siemens
- **-H** (SAT1) Satchwell
- **-K** (STA1) Landis & Staefa
- -L (TAC1) TAC
- -M (2.2K3A1) Johnson Controls
- -N (3K3A1) Alerton
- **-P** (30K6A1) Drayton
- **-Q** (50K6A1) Ambiflex
- -S (SAT2) Satchwell
- -T (SAT3) Satchwell
- -W (SIE1) Siebe
- **-Y** (STA2) Landis & Staefa
- -Z (10K NTC) Carel
- **-DC** (10K4A1) Delta Controls

Interface Options (add to part code)*

-SP Resistive set point 0-10kΩ or 11-1kΩ

-FS3 Resistive 3-speed fan switch-FS4 Resistive 3-speed fan switch-FS5 Resistive 5-speed fan switch

-LEDG 24V green LED-MS Momentary switch

Accessories

DECOR Decorators trim plate
GASKET Insulating gasket (pack of 10)

Specification

Output types:

Thermistor Resistive
PT100a Resistive
PT1000a Resistive
NI1000a Resistive
Set point Resistive
Fan speed Resistive
Mom. switch N/O push button

Accuracy:

Thermistor ±0.2°C

PT100a ±0.2°C @ 25°C PT1000a ±0.2°C @ 25°C NI1000a ±0.4°C @ 0°C

Housing:

Material ABS (flame retardant)

Colour RAL 9003 polished white finish

Dimensions $115 \times 85 \times 28 \text{mm}$ Ambient range $-10 \text{ to } 60^{\circ}\text{C}$ Protection IP30

Protection IP30
Weight 120g
Country of origin UK

* Interface Restrictions

- SP only
- MS only
- SP-MS only
- SP-FSx only

WEEE Directive:



At the end of the products useful life please dispose as per the local regulations. Do not dispose of with normal household waste. Do not burn.



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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 sunlight, on an outside wall or near heat sources. An idea mounting height is 1.5m from the floor.
- 2. Undo the tamperproof screw at the bottom of the housing and remove the front panel from the base.
- 3. Using the base as a template mark the hole centres and fix to the wall with suitable screws. Alternatively the base plate can be mounted on to a conduit box or standard recessed back box. The base plate is suitable for EU & North America fixings.
- 4. 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.
- 5. Replace the housing to the base plate and re-fit the tamperproof screw (if required) through the lug at the bottom of the base plate.

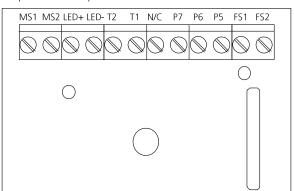
Connections

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.

Temperature only:



Temperature and Options:



All thermistor/RTD elements and options are polarity independent

MS1 & MS2 Momentary switch
 LED+ & LED- 24V supply for LEDG
 T2 & T1 Temperature sensor
 P5 & P6 Set point, resistive 0-10kΩ
 P6 & P7 Set point, resistive 11-1kΩ
 FS1 & FS2 Fan speed, resistive

Set point, this is available in two standard values;

- + (legend markings on housing fascia) $0k\Omega$ $10k\Omega$ $11k\Omega$

Using an external $1k\Omega$ resistor (not supplied) on the 0-10k terminals 1-11k Ω can be achieved if required. Potentiometer tolerances are $\pm 30\%$

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

Switch position Output 0 Open circuit 1 22.7k Ω 2 26k Ω 3 29.3k Ω Auto 32.6k Ω

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

Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.