

# SSO600/STO600



## Outside Sensors (Sun, Temperature)

These sensors are for use with Satchwell controllers to provide relevant temperature influence on the heating and air conditioning plant, in accordance with prevailing weather conditions. The SSO solar sensors have particular advantages to combat the specific effect of solar heat gain. Their application is a true benefit to modern glass/translucent buildings where solar gain is a negative influence on comfort and occupant efficiency. Energy savings will be realised by allowing for solar contributions. All these sensors can be used in conjunction with Satchwell controllers to influence set points, for monitoring or for direct override of plant schedules. The IP 65 rated designs are durable, reliable and accurate.

These sensors are available with the standard 'Satchwell' temperature sensor output characteristic.

## SPECIFICATIONS

### Control Function

STO600: . . . . . Outside Temperature

SSO600: . . . . . Solar Gain Effect

Resistance at 20°C . . . . . 5573Ω

Temperature Sensing Range . . . . . -40 to 55°C

Compatible Controllers . . . . . BAS, CSC, CSMC, IAC, KMC, MMC, Satchwell MicroNet, Satchwell Σ (Sigma).

Protection Class . . . . . IP 65

Sensing Element . . . . . Negative Temperature Coefficient thermistor

Max Sensing Temperature . . . . . 55°C

Min Sensing Temperature . . . . . -40°C

Wiring . . . . . 2-wire non-polarised low voltage dc (Safety Extra Low Voltage (SELV)).

Ambient Temperature Limits . . . . . -40 to 55°C  
- at Head

Max Temperature in Storage/Transit . . . . . 55°C

Min Temperature in Storage/Transit . . . . . -40°C

Max Humidity in Operation . . . . . 95% RH

Min Humidity in Operation . . . . . 0% RH

Max Humidity in Storage/Transit . . . . . 95% RH

Min Humidity in Storage/Transit . . . . . 0% RH

Head . . . . . Moulded base with screw on lid.

Head Material . . . . . Nylon 6/Nylon 66 Copolymer.  
SSO600 has a clear Polycarbonate lid.

Head Colour . . . . . White.  
SSO600 has a clear lid.

Terminals . . . . . Terminal block accepts  
2 × 1mm<sup>2</sup> wires, larger sizes not recommended.

Accessories . . . . . None

Characteristics . . . . . Non linear

## DIMENSIONS mm (in)

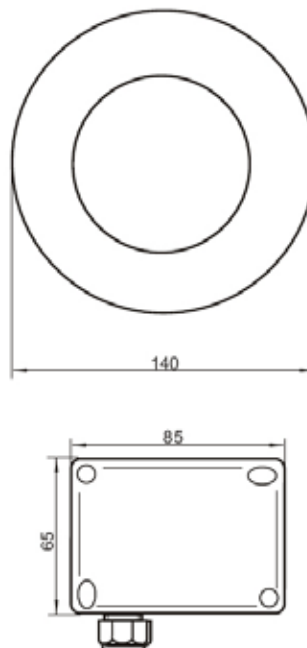


Fig 1

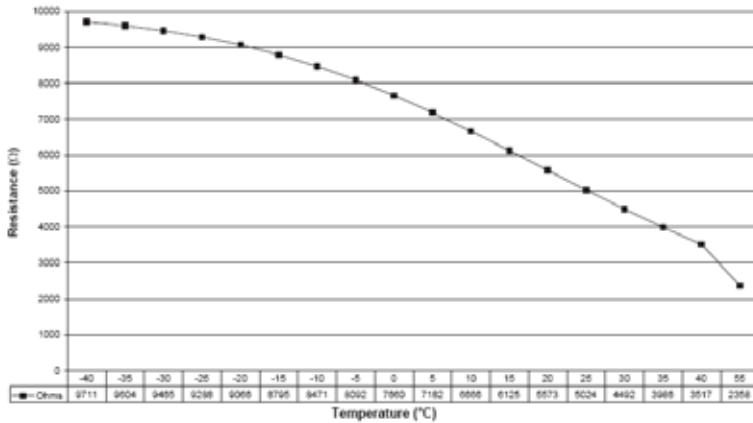
**PARTS**

Part Number	Order Code
SSO600	5126050000
STO600	5126060000

**CHARACTERISTICS:**

Sensor Temperature v Resistance

SSO600: -40 to +55°C  
STO600: -40 to +55°C



**FEATURES**

- Very fast response to temperature change.
- Head design has easily removable, lid. (SSO designs have clear lid).
- Fully Backwards compatible
- Small Physical Size
- Simple wiring connections.
- Simple commissioning.
- IP 65 as standard.

**WIRING PRECAUTIONS**

Refer to the datasheet relevant to the controller to which sensor is to be connected (see table on page 2).

Maximum resistance, 15Ω per core.

**CAUTIONS:**

- Do not apply any voltages until a qualified technician has checked the system and the commissioning procedures have been completed.
- This sensor must only be used in conjunction with the appropriate controllers.
- Observe wiring precautions given on the datasheet for the controller that the sensor will be connected to.
- Do not exceed the maximum ambient temperatures.
- Interference with parts under sealed covers invalidates the guarantee.
- Design and performance of equipment is subject to improvement and therefore liable to alteration without notice.
- Information is given for guidance only and we do not accept responsibility for the selection and installation of products unless information has been given in writing relating to a specific application.
- A periodic system and tuning check of the control system is recommended. Please contact your local sales office for details.