

# Temperature Sensors



# STR100, 200 & 500 Series

Living Space



#### STR Family

The STR range of wall modules are designed to provide temperature sensing in a wide variety of Living Space applications. Contemporary design ensures they are suitable for installation in both new and existing buildings. The STR wall modules are designed to be mounted directly onto the wall or a back-box/J-box. The base plate is designed to be compatible with a wide range of global fixing methods.

#### STR100 Series

#### TAC Xenta Controllers (except Xenta 102-AX)

Part number	Model number	Temp sensor	Mode indicator	Xenta OP jack	Set-point offset	Bypass button	Fan speed control
004600100	STR100	1.8 kΩ					
004600110	STR100-W	1.8 kΩ					
004600200	STR101	1.8 kΩ	Х	Х			
004600300	STR102	1.8 kΩ	Х	Х	Х		
004600700	STR103	1.8 kΩ	Х	Х		Х	
004600400	STR104	1.8 kΩ	Х	Х	Х	Х	
004600500	STR106	1.8 kΩ	Х	Х	Х	Х	A-0-1-11-111
004600800	STR106-B	1.8 kΩ	Х	Х	Х	Х	A-0-1-11-111
004600900	STR106-3	1.8 kΩ	Х	Х	Х	Х	A-0-1-11-111
004600600	STR107	1.8 kΩ	Х	Х	Х	Х	Auto-Off-On

STR106-B bypass button has no icon (blank)

STR106-3 set-point offset max 3 °C (5.4 °F)

#### STR200 Series TAC Xenta 102-AX and I/NET Controllers

Part number	Model number	Temp sensor	Mode indicator	Xenta OP jack	Set-point offset	Bypass button	Fan speed control
004603000	STR200	10 kΩ					
004603010	STR200-W	10 kΩ					
004603200	STR202	10 kΩ		Х	Х	Х	

#### STR500 Series

#### Andover Continuum Controllers

Part number	Model number	Temp sensor	Mode indicator	RJ-10 jack	Set-point offset	Bypass button	Fan speed control
004606000	STR500	10 kΩ					
004606100	STR502	10 kΩ	Х	Х	Х		
004606200	STR504	10 kΩ	Х	Х	Х	Х	

# STR600 & 800 Series

Living Space

#### STR600 Series Satchwell Controllers

Part number	Model number	Temp sensor	Mode indicator	Xenta OP jack	Set-point offset	Bypass button	Fan speed control
004604000	STR600D	30 kΩ					
004604100	STR600	5.02 kΩ					
004604200	STR601	5.02 kΩ	Х				
004604300	STR602	5.02 kΩ			Х		
004604400	STR609	5.02 kΩ	Х		Х		Auto-Off-On
004604500	STR610	5.02 kΩ	Х		Х		A-0-1-11-111
004604600	STR611	5.02 kΩ			Х		
004604700	STR612	5.02 kΩ	Х		Х		
004604800	STR613	5.02 kΩ	Х		Х		
004604900	STR614	3k (SVT)					

STR600D for Drayton controllers

STR611 set-point offset not user accessible STR612 has 10 ... 30 °C set-point dial

STR613 has generic - to + set-point dial



#### STR800 Series I/A Controllers

The STR800 series of living space temperature sensors are designed to be used with the I/A series of controllers and to replace the existing TSMN range.

The introduction of these sensors completes the STR range so a single design style can be offered across the Schneider Electric range.

The products are simple to install and can be directly wall mounted or mounted on to a back-box/J-box. They are designed for use in any public building, such as offices, hotels, schools or shopping malls. A model selection guide is shown below.

#### Specifications

Output	NTC Thermistor, Balco, or Platinum Resistance
Range	0 50 °C (32 122 °F) Max. 90% RH non-condensing

Accuracy: See Appendix A, table G

Part number	Model number Description		Compare to
004607000	STR800	Living Space temp sensor	TSMN-57011-850
004607100	STR801	Living Space temp sensor w/ASD jack	TSMN-90220-850
004607200	STR802F	Living Space temp w/ °F set-point Adj. & ASD jack	_
004607210	STR802C	Living Space temp w/ °C set-point Adj. & ASD jack	_
004607220	STR802WC	Living Space temp w/warmer/cooler set-point Adj. & ASD jack	_
004607300	STR803	Living Space temp w/bypass & ASD jack	TSMN-90230-850
004607400	STR804F	Living Space temp w/bypass °F set-point Adj. & ASD jack	TSMN-90250-850
004607410	STR804C	Living Space temp w/bypass °C set-point Adj. & ASD jack	TSMN-90250-852
004607420	STR804WC	Living Space temp w/bypass/warmer/cooler set-point Adj. & ASD jack	_
004607500	STRBKO	Living Space temp sensor	TSMN-81011
004607510	STRPKO	Living Space temp sensor	TSMN-58011



### STR300 & 150 Living Space



#### **STR300**

The STR300 is an electronic living space transmitter that converts a measured temperature into an electric current signal. The transmitter is delivered as a complete unit, comprising a Pt100 class B sensing element and an amplifier mounted in a housing. STR300 is intended either for surface mounting on a wall or installation in a standard back-box/J-box in conditioned spaces.

#### Specifications

Output	4 20 mA
Range	0 40 °C (32 104 °F)
Accuracy	$\pm 0.5~^{\circ}\text{C}$ at 25 $^{\circ}\text{C}$ (±0.9 $^{\circ}\text{F}$ at 77 $^{\circ}\text{F})$
Supply	15 30 Vdc

Part number	Model number	Description	System
006922000	STR300	Living Space Temperature Transmitter	All



#### STR150

#### TAC Xenta 102 / 103 / 104 and 121 Controllers (except Xenta 102-AX)

The STR150 is a wall module optimized for public facilities such as office buildings, hotels, hospitals, schools and shopping malls. Its attractive appearance and well designed interface makes it suitable for any contemporary building. It is easy to operate and install. STR wall modules are mounted directly on the wall or onto a back-box/J-box and the base plate is designed to be compatible with common global fixing methods. The STR150 is equipped with an LCD for displaying information.

Range	5 45 °C (41 113 °F)
Accuracy	±0.5 °C at 15 30 °C (±0.9 °F at 59 86 °F)
Resolution	0.1 0.5 °C (0.2 0.9 °F)
Supply	From controller

Part number	Model number	Com	Display	Backlight
004602800	STR150	Special Comms on digital input	Х	

# STR250 & 350/351

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#### STR250

#### TAC Xenta 102-AX Controller

STR wall modules are optimized for public facilities such as office buildings, hotels, hospitals, schools and shopping malls. Their attractive appearance and well designed interface makes them suitable for any contemporary building. They are easy to operate and install. STR wall modules are designed to be mounted directly on the wall or onto a variety of back-boxes/ J-boxes. The plug-in concept makes wiring quick and easy.

The STR250 replaces the I/STAT LCD with regard to major functionality such as indoor and outdoor temperature indication, set-point adjustment, bypass mode and fan speed commands. The STR250 can be used with the I/NET 7728 and MR, and Xenta 102-AX controllers. All local configuration is carried out using an M/STAT module.

#### Specifications

Range	5 45 °C (41 113 °F)
Accuracy	$\pm 0.5$ °C at 15 … 30 °C (±0.9 °F at 59 … 86 °F)
Resolution	Selectable, 0.1 0.5 °C (0.2 0.9 °F)
Supply	From controller

Part number	Model number	Com	Display	Backlight
004603300	STR250	Special Comms	Х	
004603310	STR250 No Logo	Special Comms	Х	

#### STR350/351 TAC Xenta Controllers (except Xenta 102-AX)

The STR350 and STR351 use LON communication to display and control the room temperature and fan speed. Optionally, one lighting group and/or one sunblind group can be controlled. The STR350/351 can also be used in TAC Vista Classic configurations, that is, without the need for separate binding tool.

Both models, STR350 and STR351, have an extra analog (0 ... 10 Vdc) input that can be connected to a  $CO_2$ , relative humidity or occupancy sensor. The STR350 and STR351 are equipped with an LCD display (STR351 with backlight) that displays the different functions of the module. STR wall modules are mounted directly on the wall or onto a back-box/J-box.

Range	5 45 °C (41 113 °F)
Accuracy	±0.6 °C (±1.0 °F)
Resolution	0.1 or 1 °C (0.2° or 2 °F)
Supply	24 Vac

Part number	Model number	Com	Display	Backlight
004605000	STR350	LonWorks	Х	
004605200	STR350-B	LonWorks	Х	
004605100	STR351	LonWorks	Х	Х
004605110	STR351 No Logo	LonWorks	Х	Х



# STD100, 200, 500 & 660



#### STD100, 200, 500

STD 100, 200 and 500 temperature sensors are intended for air duct mounting. The STD housing is equipped with a  $\emptyset$  20 mm (0.79 in.) cut-out for the cable, a 20 mm (0.79 in.) conduit gland nut and a mounting flange. Accuracy: See Appendix A, tables A, B, C

Part number	Model number	Description	Probe length	System
5123002010	STD100-50	Duct Temperature Sensor	50 mm (1.97 in.)	TAC Vista, TAC Xenta
5123004010	STD100-100	Duct Temperature Sensor	100 mm (3.94 in.)	TAC Vista, TAC Xenta
5123006010	STD100-150	Duct Temperature Sensor	150 mm (5.91 in.)	TAC Vista, TAC Xenta
5123008010	STD100-200	Duct Temperature Sensor	200 mm (7.87 in.)	TAC Vista, TAC Xenta
5123010010	STD100-250	Duct Temperature Sensor	250 mm (9.84 in.)	TAC Vista, TAC Xenta
5123012010	STD100-300	Duct Temperature Sensor	300 mm (11.81 in.)	TAC Vista, TAC Xenta
5123014010	STD100-400	Duct Temperature Sensor	400 mm (15.75 in.)	TAC Vista, TAC Xenta
5123030010	STD200-50	Duct Temperature Sensor	50 mm (1.97 in.)	TAC I/NET
5123032010	STD200-100	Duct Temperature Sensor	100 mm (3.94 in.)	TAC I/NET
5123034010	STD200-150	Duct Temperature Sensor	150 mm (5.91 in.)	TAC I/NET
5123036010	STD200-200	Duct Temperature Sensor	200 mm (7.87 in.)	TAC I/NET
5123038010	STD200-250	Duct Temperature Sensor	250 mm (9.84 in.)	TAC I/NET
5123040010	STD200-300	Duct Temperature Sensor	300 mm (11.81 in.)	TAC I/NET
5123042010	STD200-400	Duct Temperature Sensor	400 mm (15.75 in.)	TAC I/NET
5123074010	STD500-150	Duct Temperature Sensor	150 mm (5.91 in.)	Andover Continuum
5123078010	STD500-250	Duct Temperature Sensor	250 mm (9.84 in.)	Andover Continuum
5123082010	STD500-400	Duct Temperature Sensor	400 mm (15.75 in.)	Andover Continuum



#### STD660

The STD660 temperature sensor is intended for air duct mounting, and has a telescopic probe extendable from 100 ... 300 mm (3.94 ... 11.81 in.). The STD660 housing is equipped with a  $\emptyset$  20 mm (0.79 in.) cut-out for the cable. A 20 mm (0.79 in.) conduit gland nut and a mounting flange are supplied with the product.

Accuracy: See Appendix A, table F

Part number	Model number	Description	Probe length	System
5126030000	STD660	Telescopic Duct Temp. Sensor	100 300 mm (3.94 11.81 in.)	Satchwell

# STD150, 300, 550, 670

#### Duct



#### STD300

STD300 is an electronic temperature transmitter that converts the temperature measured into an electric current signal of 4 ... 20 mA. The transmitter is delivered as a complete unit, comprising a stainless steel immersion well, the sensing element and an amplifier, mounted in a housing.

The transmitter is intended for immersion installation and is used for temperature measurement in air ducts. The transmitter connects via a 2-wire cable, which serves both as power supply and for signal transmission.

#### Specifications

Output	2-wire, 4 20 mA
Range	-50 50 °C; 0 100 °C (-58 122 °F; 32 212 °F)
Accuracy	±0.4% of range
Supply	15 36 Vdc

Part number	Model number	Description	Probe length	System
006920141	STD300-300 0/100	Duct Temperature Sensor	300 mm (11.81 in.)	All
006920121	STD300-300 -50/50	Duct Temperature Sensor	300 mm (11.81 in.)	All

#### STD670

The STD670 temperature sensor is intended for air duct mounting. The STD670 has 1.5 m flying leads.

Accuracy: See Appendix A, table F

Part number	Model number	Description	System
5126040000	STD670	Duct Temperature Sensor	Satchwell



#### STD150, 550

The STD150 and 550 are intended for measuring air temperature in fan coil applications or exhaust ducts.

The sensors, which are made of stainless steel, are delivered with a 2 m (6.5 ft.) cable, PVC sheathed overall. Mounting details such as screw and clamp are included with the product.

Accuracy: See Appendix A, tables A, C

Part number	Model number	Description	System
5123058000	STD150	Duct Temperature Sensor	TAC Vista TAC Xenta
5123084000	STD550	Duct Temperature Sensor	Andover Continuum





## STD190, 290, 400, 410, 591

#### **Duct Averaging**



#### STD190, 290, 591

The STD190, STD290, and STD591 sensors are delivered as complete units that consist of a housing and a cable with four sensors located at 0.5 m (1.6 ft.) intervals. The distance from the first sensor to the housing is 2.5 m (8.2 ft.).

This mean-value temperature sensor contains four thermistors. It is is used for temperature measurement in air ducts and is mounted onto a grid or on wires suspended across a duct.

Accuracy: See Appendix A, tables D, E

Part number	Model number	Description	System
5123060010	STD190	Average Duct Temperature Sensor	TAC Vista TAC Xenta
5123060020	STD290	Average Duct Temperature Sensor	TAC I/NET
5123086010	STD591	Average Duct Temperature Sensor	Andover Continuum



#### STD400/410

The STD400 and STD410 are electronic averaging transmitters that convert the average measured temperature into an electric signal, either 4  $\dots$  20 mA (STD400) or 0  $\dots$  10 Vdc (STD410). They are used for temperature measurement in air ducts.

The transmitter is available in lengths of 0.4 m (1.3 ft.), 3 m (9.8 ft.) and 6 m (19.7 ft.), with the temperature measurements taken over the entire length of the sensor. The 0.4 m (1.3 ft.) sensor has a solid copper element, whilst the 3 m (9.8 ft.) and 6 m (19.7 ft.) sensors have a flexible PVC insulated element, which can be bent to a minimum radius of 50 mm (2 in.), allowing the sensor to be shaped across larger ducts.

Connection is with either 2-wire (4 ... 20 mA) or 3-wire (0 ... 10 Vdc) cable.

#### **Specifications**

Range	-50 50 °C; 0 100 °C (-58 122 °F; 32 212 °F)
Accuracy	±0.4% of range
Supply	24 Vac (±10%) or 15 36 Vdc

Part number	Model number	Description	Probe length	Output	System
006920681	STD400-04 0/100	Average Duct Temperature Transmitter	0.4 m (1.31 ft.)	4 20 mA	All
006920701	STD400-04 -50/50	Average Duct Temperature Transmitter	0.4 m (1.31 ft.)	4 20 mA	All
006920721	STD400-30 0/100	Average Duct Temperature Transmitter	3 m (9.84 ft.)	4 20 mA	All
006920741	STD400-30 -50/50	Average Duct Temperature Transmitter	3 m (9.84 ft.)	4 20 mA	All
006920761	STD400-60 0/100	Average Duct Temperature Transmitter	6 m (19.69 ft.)	4 20 mA	All
006920781	STD400-60 -50/50	Average Duct Temperature Transmitter	6 m (19.69 ft.)	4 20 mA	All
006920841	STD410-04 0/100	Average Duct Temperature Transmitter	0.4 m (1.31 ft.)	0 10 Vdc	All
006920861	STD410-04 -50/50	Average Duct Temperature Transmitter	0.4 m (1.31 ft.)	0 10 Vdc	All
006920881	STD410-30 0/100	Average Duct Temperature Transmitter	3 m (9.84 ft.)	0 10 Vdc	All
006920901	STD410-30 -50/50	Average Duct Temperature Transmitter	3 m (9.84 ft.)	0 10 Vdc	All
006920921	STD410-60 0/100	Average Duct Temperature Transmitter	6 m (19.69 ft.)	0 10 Vdc	All
006920941	STD410-60 -50/50	Average Duct Temperature Transmitter	6 m (19.69 ft.)	0 10 Vdc	All

Schneider

# STX120, 122, 140, 520

Immersion



#### STX140

The sensor, which is made of polythene tube  $\emptyset$  10 mm (0.39 in.), is delivered with a 2 m (6.56 ft.) cable. The STX140 is primarily intended for laying underfloor. Four thermistors are evenly spaced along the length of the tube.

When laying underground, the thermistor cable should be placed in pipes with a minimum inside diameter of 12 mm (0.47 in.).

Accuracy: See Appendix A, table D

Part number	Model number	Description	System
5123310000	STX140	Ground Temperature Sensor	TAC Vista TAC Xenta



#### STX120, 220, 520

The sensor, which is made of stainless steel, is delivered with a 2 m (6.56 ft.) or 4 m (13.12 ft.) cable PVC sheathed overall. STX120 is intended for measuring water temperature in heating applications, mounted in a well/pocket.

Accuracy: See Appendix A, tables A, D

Part number	Model number	Description	System
5123302000	STX120-200	Immersion Temperature Sensor	TAC Vista TAC Xenta
5123304000	STX120-400	Immersion Temperature Sensor	TAC Vista TAC Xenta
5123240000	STX220-400	Immersion Temperature Sensor	TAC I/NET
5123320000	STX520-200	Immersion Temperature Sensor	Andover Continuum
5123322000	STX520-400	Immersion Temperature Sensor	Andover Continuum



#### STX122, 222

The STX122 is primarily intended for pipe mounting without a separate pocket in heating coils. The insert pipe is stainless steel. The sensor is delivered with a 2 m (6.56 ft.) connecting cable, and has a R1/4 in. (DN 8) male thread fixing. As standard the sensor is delivered with a separate R1/2 in. (DN 15) male thread reducing bush.

Accuracy: See Appendix A, table A

Part number	Model number	Description	Probe length	System
5123306000	STX122-250	Coil Temperature Sensor	250 mm (9.84 in.)	TAC Vista TAC Xenta
5123308000	STX122-400	Coil Temperature Sensor	400 mm (15.75 in.)	TAC Vista TAC Xenta
5123242000	STX222-250	Coil Temperature Sensor	250 mm (9.84 in.)	TAC I/NET
5123244000	STX222-400	Coil Temperature Sensor	400 mm (15.75 in.)	TAC I/NET



# STP100, 200, 500, 600

Immersion



#### STP100, 200, 500, 600

These sensors are designed for immersion mounting in pipe systems with a separate pocket/well. The pocket/well is sealed, making it easy to replace the sensor if necessary. The STP housing is equipped with a Ø 20 mm (0.79 in.) cable fitting. A 20 mm (0.79 in.) cable gland is supplied. The pocket/well must be ordered separately (see page 18 for ordering information).

Accuracy: See Appendix A, tables A, B, C

Part number	Model number	Description	Probe length	System
5123102010	STP100-50	Pipe Temperature Sensor	50 mm (1.97 in.)	TAC Vista, TAC Xenta
5123104010	STP100-100	Pipe Temperature Sensor	100 mm (3.94 in.)	TAC Vista, TAC Xenta
5123106010	STP100-150	Pipe Temperature Sensor	150 mm (5.91 in.)	TAC Vista, TAC Xenta
5123108010	STP100-200	Pipe Temperature Sensor	200 mm (7.87 in.)	TAC Vista, TAC Xenta
5123110010	STP100-250	Pipe Temperature Sensor	250 mm (9.84 in.)	TAC Vista, TAC Xenta
5123112010	STP100-300	Pipe Temperature Sensor	300 mm (11.81 in.)	TAC Vista, TAC Xenta
5123114010	STP100-400	Pipe Temperature Sensor	400 mm (15.75 in.)	TAC Vista, TAC Xenta
5123130010	STP200-50	Pipe Temperature Sensor	50 mm (1.97 in.)	TAC I/NET
5123132010	STP200-100	Pipe Temperature Sensor	100 mm (3.94 in.)	TAC I/NET
5123134010	STP200-150	Pipe Temperature Sensor	150 mm (5.91 in.)	TAC I/NET
5123136010	STP200-200	Pipe Temperature Sensor	200 mm (7.87 in.)	TAC I/NET
5123138010	STP200-250	Pipe Temperature Sensor	250 mm (9.84 in.)	TAC I/NET
5123140010	STP200-300	Pipe Temperature Sensor	300 mm (11.81 in.)	TAC I/NET
5123142010	STP200-400	Pipe Temperature Sensor	400 mm (15.75 in.)	TAC I/NET
5123170010	STP500-50	Pipe Temperature Sensor	50 mm (1.97 in.)	Andover Continuum
5123172000	STP500-100	Pipe Temperature Sensor	100 mm (3.94 in.)	Andover Continuum
5123174010	STP500-150	Pipe Temperature Sensor	150 mm (5.91 in.)	Andover Continuum
5123176010	STP500-200	Pipe Temperature Sensor	200 mm (7.87 in.)	Andover Continuum
5123180010	STP500-300	Pipe Temperature Sensor	300 mm (11.81 in.)	Andover Continuum
5123182000	STP500-400	Pipe Temperature Sensor	400 mm (15.75 in.)	Andover Continuum
5126010000	STP600D	Pipe Temperature Sensor	100 mm (3.94 in.)	Drayton



# STP120, 220, 620, 660

#### Immersion



#### STP120, 220, 620

The STP120, 220, 620 temperature sensors are intended for immersion mounting in pipe systems without requiring a pocket/well. This product is for use in fast time constant systems such as district heating applications. The STP housing is equipped with a  $\emptyset$  20 mm (0.79 in.) cable fitting. A 20 mm (0.79 in.) cable gland is supplied.

Accuracy: See Appendix A, tables A, B, F

Part number	Model number	Description	Probe length	System
5123158010	STP120-70	Pipe Temperature Sensor	70 mm (2.76 in.)	TAC Vista TAC Xenta
5123160010	STP120-120	Pipe Temperature Sensor	120 mm (4.72 in.)	TAC Vista TAC Xenta
5123162010	STP120-220	Pipe Temperature Sensor	220 mm (8.66 in.)	TAC Vista TAC Xenta
5123230000	STP220-70	Pipe Temperature Sensor	70 mm (2.76 in.)	TAC I/NET
5123232000	STP220-120	Pipe Temperature Sensor	120 mm (4.72 in.)	TAC I/NET
5123234000	STP220-220	Pipe Temperature Sensor	220 mm (8.66 in.)	TAC I/NET
5126090000	STP620	Pipe Temperature Sensor	100 mm (3.94 in.)	Satchwell



#### **STP660**

The STP660 temperature sensor is intended for immersion mounting in pipe systems with a separate pocket/well, and has a telescopic probe extendable from 100 ... 300 mm (3.94 ... 11.81 in.). This technology makes the product ideal for the HVAC service industry as the probe is adjustable for various sizes of pocket/well (see page 18 for ordering information). The tip is primed with heat conductive paste, ensuring that the time constant is optimized. The pocket/well is sealed, making it easy to replace the sensor if necessary.

The STP housing is equipped with a  $\emptyset$  20 mm (0.79 in.) cable fitting. A 20 mm (0.79 in.) cable gland is supplied. As there is a choice of both pocket/well material (brass or stainless steel) and size (120 or 200 mm) (3.94 or 7.87 in.) for this sensor, the pocket/well must be ordered separately. See the DWA range in the pockets/wells section of this catalog.

Accuracy: See Appendix A, table F

Part number	Model number	Description	Probe length	System
5126080000	STP660	Telescopic Pipe Temp. Sensor	100 300 mm (3.94 11.81 in.)	Satchwell



# STP300



#### STP300

The STP300 is an electronic immersion temperature transmitter that converts a measured temperature into an electronic current signal of 4 ... 20 mA. The STP300 is designed for immersion mounting in pipe systems with a separate pocket/well (see page 18 for ordering information). The pocket/well is sealed, making it easy to replace the transmitter if necessary.

The transmitter is intended for measurement of high and low temperatures. The transmitter is connected with a 2-wire cable, which serves both as power supply and for signal transmission. The reading of the measured signal is done over an external load resistance.

Output	2-wire, 4 20 mA
Range	0 100 °C, 0 160 °C or -50 50 °C (32 212 °F, 32 320 °F or -58 122 °F)
Accuracy	±0.4% of range
Supply	15 36 Vdc

Part number	Model number	Description	Probe length
006920241	STP300-100 0/100	Pipe Temperature Sensor 0 100 °C (32 212 °F)	100 mm (3.94 in.)
006920261	STP300-100 0/160	Pipe Temperature Sensor 0 160 °C (32 320 °F)	100 mm (3.94 in.)
006920221	STP300-100 -50/50	Pipe Temperature Sensor -50 50 °C (-58 122 °F)	100 mm (3.94 in.)
006920301	STP300-200 0/100	Pipe Temperature Sensor 0 100 °C (32 212 °F)	200 mm (7.87 in.)
006920321	STP300-200 0/160	Pipe Temperature Sensor 0 160 °C (32 320 °F)	200 mm (7.87 in.)
006920281	STP300-200 -50/50	Pipe Temperature Sensor -50 50 °C (-58 122 °F)	200 mm (7.87 in.)
006920361	STP300-300 0/100	Pipe Temperature Sensor 0 100 °C (32 212 °F)	300 mm (11.81 in.)
006920381	STP300-300 0/160	Pipe Temperature Sensor 0 160 °C (32 320 °F)	300 mm (11.81 in.)
006920341	STP300-300 -50/50	Pipe Temperature Sensor -50 50 °C (-58 122 °F)	300 mm (11.81 in.)
006920421	STP300-400 0/100	Pipe Temperature Sensor 0 100 °C (32 212 °F)	400 mm (15.75 in.)
006920441	STP300-400 0/160	Pipe Temperature Sensor 0 160 °C (32 320 °F)	400 mm (15.75 in.)
006920401	STP300-400 -50/50	Pipe Temperature Sensor -50 50 °C (-58 122 °F)	400 mm (15.75 in.)

### Pockets/Wells



#### Pockets/Wells

The table below provides a list of pockets/wells suitable for use with most pipe sensors and transmitters. For Satchwell pipe sensors use DWA pockets/ wells. Note: pockets/wells must be ordered separately.

Part number	Description	Probe length
9121040000	Pocket STP 50 mm Brass	50 mm (1.97 in.)
9121050000	Pocket STP 50 mm Stainless steel	50 mm (1.97 in.)
9121041000	Pocket STP 100 mm Brass	100 mm (3.94 in.)
9121051000	Pocket STP 100 mm Stainless steel	100 mm (3.94 in.)
9121042000	Pocket STP 150 mm Brass	150 mm (5.91 in.)
9121052000	Pocket STP 150 mm Stainless steel	150 mm (5.91 in.)
9121043000	Pocket STP 200 mm Brass	200 mm (7.87 in.)
9121053000	Pocket STP 200 mm Stainless steel	200 mm (7.87 in.)
9121044000	Pocket STP 250 mm Brass	250 mm (9.84 in.)
9121054000	Pocket STP 250 mm Stainless steel	250 mm (9.84 in.)
9121045000	Pocket STP 300 mm Brass	300 mm (11.81 in.)
9121055000	Pocket STP 300 mm Stainless steel	300 mm (11.81 in.)
9121046000	Pocket STP 400 mm Brass	400 mm (15.75 in.)
9121056000	Pocket STP 400 mm Stainless steel	400 mm (15.75 in.)
9121058000	Pocket Adaptor (Satchwell DWA0001)	N/A
9121060000	Pocket STP 120 mm Stainless steel (Satchwell DWA0002)	120 mm (4.72 in.)
9121062000	Pocket STP 200 mm Brass (Satchwell DWA0003)	200 mm (7.87 in.)
9121064000	Pocket STP 200 mm Stainless steel (Satchwell DWA0004)	200 mm (7.87 in.)
9121066000	Pocket STP 120 mm Brass (Satchwell DWA0005)	120 mm (4.72 in.)



# STC100, 110, 120,200, 210, 500, 510, 600

Strap-on/Contact



#### STC100, 200, 500, 600

STC strap on temperature sensors are designed for surface pipe mounting. The STC housing is equipped with a  $\emptyset$  20 mm (0.79 in.) cable fitting.

Accuracy: See Appendix A, tables A, B, C, F

Part number	Model number	Description	System
5123202010	STC100	Contact Temperature Sensor	TAC Vista TAC Xenta
5123206010	STC200	Contact Temperature Sensor	TAC I/NET
5123218010	STC500	Contact Temperature Sensor	Andover Continuum
5126070000	STC600	Contact Temperature Sensor	Satchwell
5126020000	STC600D	Contact Temperature Sensor	Drayton

#### STC110, 210, 510

The STC110, 210 and 510 temperature sensors are designed for mounting on pipe systems of max. Ø 90 mm (3.54 in.). The temperature sensor is supplied with a connection cable of 2 m (6.56 ft.) or 4 m (13.12 ft.).

Accuracy: See Appendix A, tables A, B, C

Part number	Model number	Description	System
5123210000	STC110-200	Contact Temperature Sensor (2 m cable)	TAC Vista TAC Xenta
5123212000	STC110-400	Contact Temperature Sensor (4 m cable)	TAC Vista TAC Xenta
5123236000	STC210-200	Contact Temperature Sensor (2 m cable)	TAC I/NET
5123238000	STC210-400	Contact Temperature Sensor (4 m cable)	TAC I/NET
5123220000	STC510-200	Contact Temperature Sensor (2 m cable)	Andover Continuum



STC120 is a temperature sensor designed for mounting on a pipe system of heating coils Ø 10 ... 15 mm (0.39 ... 0.59 in.). The sensor is supplied with a connection cable of 250 mm (9.84 in.).

Accuracy: See Appendix A, table A

Part number	Model number	Description	System
5123214000	STC120	Contact Temperature Sensor	TAC Vista TAC Xenta







### STC300 Strap-on/Contact



#### STC300

STC300 is an electronic pipe contact temperature transmitter that converts the temperature measured into an electronic current signal 4  $\dots$  20 mA. The transmitter is delivered as a complete unit, comprising a pipe clamp, the sensing element and an amplifier, mounted in a housing. The sensor and amplifier are encapsulated in separate units, to protect the electronics from excessive heat. A 2 m (6.56 ft.) cable connects the two units.

The transmitter element is intended for external mounting directly on pipes, [max diameter 100 mm (3.94 in.)] e.g., for flow and return water pipes. The transmitter is connected with a 2-wire cable, which serves both as power supply and for signal transmission.

Output	2-wire, 4 20 mA
Range	0 100 °C, 0 160 °C or -50 50 °C (32 212 °F, 32 320 °F or -58 122 °F)
Accuracy	±0.3 °C at 25 °C
Supply	15 36 Vdc

Part number	Model number	Description	System
006920041	STC300 0/100	Contact Temperature Sensor 0 100 °C (32 212 °F)	All
006920061	STC300 0/160	Contact Temperature Sensor 0 160 °C (32 320 °F)	All
006920021	STC300 -50/50	Contact Temperature Sensor -50 50 °C (-58 122 °F)	All



# STO100, 200, 300, 500, 600

Outdoor



#### STO100, 200, 500, 600

These outdoor sensors are intended for outdoor wall mounting. Variants are available for TAC Vista, TAC I/NET, Andover Continuum and Satchwell systems. The body has a  $\emptyset$  20 mm (0.79 in.) conduit entry and the product is supplied with a conduit gland.

Accuracy: See Appendix A, tables A, B, C, F

Part number	Model number	Description	System
5141100010	STO100	Outdoor Temperature Sensor	TAC Vista TAC Xenta
5123246000	STO200	Outdoor Temperature Sensor	TAC I/NET
5141104010	STO500	Outdoor Temperature Sensor	Andover Continuum
5126060000	STO600	Outdoor Temperature Sensor	Satchwell
5126050000	SSO600	Outdoor Temperature Sensor	Satchwell
5126000000	STO600D	Outdoor Temperature Sensor	Drayton
5141104010 5126060000 5126050000	STO500 STO600 SSO600	Outdoor Temperature Sensor Outdoor Temperature Sensor Outdoor Temperature Sensor	Andover Continuum Satchwell Satchwell



#### STO300

The STO300 transmitter is supplied as a complete unit, comprising a sensing element and an amplifier mounted in a housing which is resistant to ultraviolet light. The transmitter is intended for mounting on an outside wall, on the north side where possible. The transmitter is connected over a 2-wire cable, which serves both as power supply and signal transmission. The reading of the measured signal is made over an external load resistance.

Output	2-wire, 4 20 mA
Range	-50 50 °C (-58 122 °F)
Accuracy	±0.4% of range
Supply	15 36 Vdc

Part number	Model number	Description	System
006920501	STO300 -50/50	Outdoor Temperature Sensor	All

### STT900 Frost Thermostats



#### STT900

The frost protection thermostats are used for air, or water-side temperature monitoring of heat exchangers, hot water circulation systems, water/air heaters, e.g. in ventilation and air conditioning systems and to avoid frost damage. The product features a small operating differential and high reproducibility. Resetting of the STT900 to STT904 occurs automatically and the STT910 to STT914 are designed to be reset manually by a reset button.

The output would typically switch off ventilators, close outside air flaps, open up air heating valves, switch on air heat pumps, switch off refrigeration compressors, switch off air humidifiers, or initiate a visual and/or acoustic frost alarm.

Location of these items is not critical, even in harsh environments as they are all rated to IP65.

Part number	Model number	Description	Capillary length	Reset type	Permissible medium
5127040000	STT900	Frost Thermostat	0.6 m (2 ft.)	Automatic	Air
5127010000	STT901	Frost Thermostat	1.8 m (5.9 ft.)	Automatic	Water
5127020000	STT902	Frost Thermostat	3 m (9.8 ft.)	Automatic	Air
5127000000	STT903	Frost Thermostat	6 m (19.7 ft.)	Automatic	Air
5127030000	STT904	Frost Thermostat	12 m (39 ft.)	Automatic	Air
5127090000	STT910	Frost Thermostat	0.6 m (2 ft.)	Manual	Air
5127060000	STT911	Frost Thermostat	1.8 m (5.9 ft.)	Manual	Water
5127070000	STT912	Frost Thermostat	3 m (9.8 ft.)	Manual	Air
5127050000	STT913	Frost Thermostat	6 m (19.7 ft.)	Manual	Air
5127080000	STT914	Frost Thermostat	12 m (39 ft.)	Manual	Air

